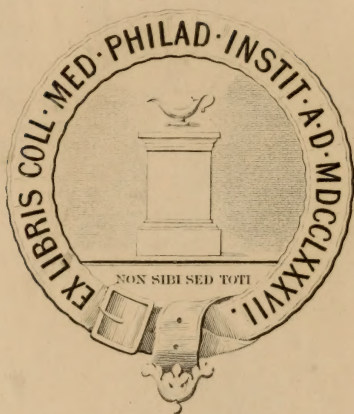
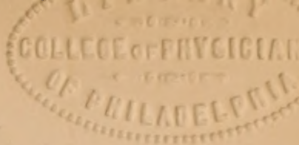


Caswell

18109



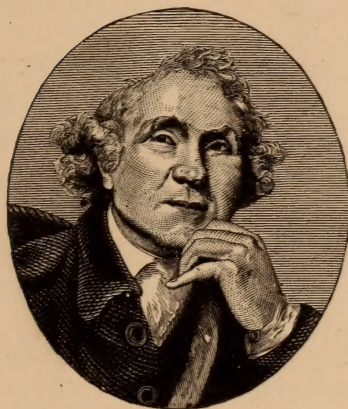


ST. LOUIS
COURIER OF MEDICINE
AND
COLLATERAL SCIENCES.

EDITORS:

E. M. NELSON, M. D. JOHN BRYSON, M. D.
G. A. MOSES, M. D. ISAAC N. LOVE, M. D.
C. A. TODD, M. D.

VOLUME III.



John Hunter

ST. LOUIS:
Medical Journal Association of the Mississippi Valley.
1880.

Digitized by the Internet Archive
in 2014

CONTRIBUTORS TO VOLUME III.

BAUDUY, J. K., M. D., St. Louis.	HODGEN, J. T., M. D., St. Louis.
BAUMGARTEN, G., M. D., St. Louis.	HOMAN, GEO., M. D., St. Louis.
BRIGGS, C. E., M. D., St. Louis.	JARNAGIN, W. C., M. D., Macon Miss.
BUCK, R., M. D., London, Ont.	KINGSLEY, J. P., M. D., St. Louis.
BULL, CHAS. S., M. D., New York City.	MAUGHS, G. M. B., M. D., St. Louis.
CRONIN, P. H., M. D., St. Louis.	MAURY, R. B., M. D., Memphis, Tenn.
CURTMAN, C. O., M. D., St. Louis.	MERKEL, S. B., M. D., Salina, Kan.
ENGELMANN, GEO. J., M. D., St. Louis.	MOSES, G. A., M. D., St. Louis.
EVERS, E., M. D., St. Louis.	MOSES, S. G., M. D., St. Louis.
FIQUET, PAUL E., St. Louis.	POLLMANN, L. P., M. D., St. Louis.
FRAZIER, W. A., M. D., St. Louis.	POST, M. H., M. D., St. Louis.
GEBSER, R., M. D., St. Louis.	RICHMOND, J. M., M. D., St. Joseph, Mo.
GLASGOW, F. A., M. D., St. Louis.	SCHENCK, P. V., M. D., St. Louis.
GLASGOW, WM. C., M. D., St. Louis.	SMITH, I. Z., St. Louis.
GOOD, J. M., Ph. G., St. Louis.	STEELE, A. J., M. D., St. Louis.
GREEN, JNO., M. D., St. Louis.	STUDER, E. J., M. D., St. Louis.
HAMMOND, W. A., M. D., New York City.	TODD, C. A., M. D., St. Louis.
HARDAWAY, W. A., M. D., St. Louis.	TUHOLSKE, H., M. D., St. Louis.
HENDERSON, R. T., M. D., Shawneetown, Mo.	VAN EMAN, J. H., M. D., Kansas City.
	VAN HARLINGEN, A., M. D., Philadelphia.

INDEX TO VOLUME III.: JANUARY—JUNE, 1880.

—

The names of Authors of "Original Articles" are put in SMALL CAPITALS; of "Translations," in *Italics*.

—

	PAGE.
Abdominal Pulsation, Idiopathic,	266
Abortion, Double Pneumonia and	210
Abscess of the Liver and Ulceration of the Large Intestine,	139
Accumulation of Cerumen, Simulating Chronic Bronchitis,	71
Albuminuric Convulsions,	78
Alcohol in Health and Disease,	234
Alienist and Neurologist,	108
Alumni Prize,	523
Amputation after Frostbite,	214
Amyl, Nitrite of	420
Anæsthesia by Nitrous Oxide and Oxygen,	555
Ancient Butter,	419
Animal Vaccination,	70, 164
American Laryngological Society,	620
American Medical Association,	618
Ante Mortem Rigor Mortis,	323
Anthropology, Crania of Murderers,	353
Antiseptic Treatment, Lister on	68
Appearance on the Globe, Man's	421
Archives of Laryngology,	424
Aspergilla Nigricans,	511
Aspergillina Pneumo-Mycosis,	264
Ass, Phantom Tumor in an	521
Association of American Medical Colleges,	619
Association of American Medical Editors,	619
Association, The American Public Health,	95
Association, The State	488, 523, 599
Aubanel Prize, The	418
Baby Elephant,	623
Bailly, Remarkable Case of Early Viability,	151
Banquet to Professor Broca,	377
Benzoate of Sodium in Phthisis,	161
BOOK REVIEWS AND NOTICES:	
Annual Report of Louisiana Board of Health,	586
Archives of Dermatology,	498
ATKINSON, Biographical Dictionary of Contemporary American Surgeons and Physicians,	172

	PAGE.
ATKINSON, Therapeutics of Gynecology and Obstetrics,	396
BRISTOWE, Theory and Practice of Medicine,	397
BRUNTON, Pharmacology and Therapeutics,	588
BUMSTEAD, The Pathology and Treatment of Venereal Diseases,	166
CARTER, Eyesight: Good and Bad,	584
CHARCOT, Lectures on the Nervous System,	175
CLARKE, A Manual of the Practice of Surgery,	295
CORNIL AND RANVIER, A Manual of Pathological Histology,	494
DARLING, The Essentials of Anatomy,	496
DAY, Headaches; Their Nature, Causes and Cure,	500
DENISON, Chest Examination Chart,	501
DENISON, Climatic Map of the Eastern Slope of the Rocky Mountains,	499
DENISON, Rocky Mountain Health Resorts,	581
DUNCAN, Clinical Lectures on the Diseases of Women,	390
ELSBURG, Structure and Other Characteristics of Colored Blood Corpuscles,	497
EMMET, Principles and Practice of Gynecology,	492
FLINT, A Manual of Auscultation and Percussion,	395
FLUCKIGER AND HANBURY, Pharmacographia,	297
FOSTER, A Text Book of Physiology,	174
FOX, Photographic Illustrations of Skin Diseases,	177, 501
GREENE, A Practical Handbook of Medical Chemistry,	583
HARLAN, Eyesight and How to Preserve It,	297
HARTSHORNE, Our Homes,	590
HIGGINS, Ophthalmic Out-Patient Practice,	181
JAMES, Sore Throat; Its Nature, Varieties and Treatment,	498
KANE, The Hypodermic Injection of Morphia,	394
KIDD, The Laws of Therapeutics,	384
LEFFMANN, First Steps in Chemical Principles,	298
LEISHMAN, A System of Midwifery,	73
MORRIS, Skin Diseases,	392
MORTIMER-GRANVILLE, Common Mind Troubles and the Secret of a Clear Head,	499
NETTLESHIP, Student's Guide to Diseases of the Eye,	590
OSGOOD, Winter and its Dangers,	179
PLAYFAIR, The Science and Practice of Midwifery,	290
REYNOLDS, A System of Medicine,	170, 589
ROUTH, Infant Feeding and Its Influence on Life,	172
STURGIS, The Student's Manual of Venereal Diseases,	500
TOLAND, Lectures on Practical Surgery,	292
Transactions of the Medical Association of the State of Missouri, 1879, 176	
Transactions of the State Medical Societies of Virginia, Tennessee, Connecticut and Alabama, and of the American Medical Association,	388
WILSON, The Summer and its Diseases,	178
WOOD, Brain-Work and Over-Work,	296
Wood's Library of Standard Medical Authors,	591
<i>Bordier</i> , Anthropology—Crania of Murderers,	353

	PAGE.
<i>Bother</i> , Pneumo-Mycosis <i>Aspergillina</i> ,	264
Bowditch, H. I.	324
Braces, Paper and Felt in Curvature of the Spine,	408
Breast, Cancer of, following Eczema of Nipple,	66
Breath of Diabetic Patients,	325
Breech Presentations, Ten Consecutive,	632
Broca, Banquet to Professor,	377
Bromide of Ethyl,	276, 573
Bronchitis, Accumulation of Cerumen Simulating Chronic	71
Bronchitis, Plastic	109
Buck, R. H., Alcohol in Health and Disease,	234
Bull, C. S., Effect of Malarial Poisoning upon the Eye,	543
Butter, Ancient	419
Calculi, Small, Simple Method of Removal,	422
Calculi, One Hundred,	621
Cancer, Chian Turpentine in	479
Cancer of Sacrum,	57
Cancer of the Breast following Eczema of the Nipple,	66
Cancer upon Surface Occupied by Lupus,	150
Cancer, Zinc Sulphate in	524
Carcinomatous Stricture of the Œsophagus,	344
Carmine Solution for Histology,	215
CASES FROM PRACTICE :	
Abscess of the Liver and Ulceration of Large Intestines,	139
Carcinomatous Stricture of the Œsophagus,	344
Impermeable Stricture of the Urethra,	553
Paper Brace in Curvature of the Spine,	350
Papillomatous Growths in Vocal Cords of a Child. Successful Removal.	44
Removal of a Submucous Uterine Fibroid,	48
Two Cases of Œsophagotomy,	550
Causes of Death after the Injection of Milk and Sugar into the Veins,	55
Cautery and Chian Turpentine in Malignant Diseases of the Female Generative Organs,	479
Cephalhematoma,	203
Cerebral Disease, Ophthalmoscope in	525
Cerebro-Spinal Sclerosis, Laryngeal Complications,	53
Cerumen, Accumulation of, Simulating Chronic Bronchitis,	71
Cervix, Lacerated	420
Chian Turpentine in Cancer,	479
<i>Chiari</i> , Necrosis of the Pancreas,	452
Chloral, Morphine and	282
Cholera, Investigation of Cause of, in Fowls,	373
Chrysophanic Acid in Psoriasis,	196
Clitoris, Enlarged	197
Closure of Larynx after Diphtheria,	56
Cold, Ophthalmic Lesions Produced by	265
Colic, Intestinal, Hamilton's Treatment,	32

	PAGE.
COMMUNICATIONS:	
Accumulation of Cerumen Simulating Chronic Bronchitis,	71
Inquiry—The Position of Women during Labor,	491
New Form of Splint,	382
The State Association,	488
Vaseline as a Basis for Unguents,	289
Conception, Time of, and Duration of Pregnancy,	438
Convulsions, Albuminuric,	78
Convulsions, Choreic, in a Child,	301
Convulsions, Puerperal,	302
Cords, Papillomatous Growths in Vocal	44
Cords, Phlyctenular Inflammation of the Vocal	64
CORRESPONDENCE:	
New York, Letter from	285
Philadelphia, Letter from	378
Vienna, Letter from	482
Courts of Justice, Obligations of Physicians to	327
Crania of Murderers,	353
Criminal Hanged and Resuscitated,	579
Croup and Diphtheria, Tracheotomy in	307
CURTMAN, C. O., Measles, (Rubeola—Morbilli)	531
Curvature of the Spine, Paper Brace in	350, 411
Cuticura Resolvent,	624
Death after Injection of Milk and Sugar into the Veins,	55
Death by Strangulation, New Sign of	465
Death from Nitrous Oxide,	324
Death Roll for 1879,	218
Death, Singular Cause of	215
Dentition, Retarded	324
Diabetic Patients, Breath of	325
Diet, Dispensary,	620
Digestive Tract, Foreign Bodies in	514
Diphtheria, Closure of Larynx after,	56
Disease of Nipples,	406
Disposal of Garbage at New Orleans,	96
Dosage of Electricity,	621
Double Pneumonia and Abortion,	210
<i>Duplay</i> , Peculiar Case of Uretero-Vaginal Fistula,	362
Early Viability, Remarkable Case of	151
Echinococcus of the Thigh,	358
Eczema of Nipple, Cancer of Breast, following	66
EDITORIAL:	
A Criminal Hanged and Resuscitated,	579
Animal Vaccination,	70, 164
A Peculiar Disease of the Skin,	280
Banquet to Professor Broca,	377
Bromide of Ethyl,	276, 573
Cancer of Breast following Eczema of Nipple,	66

	PAGE.
Erythema Uterinum,	576
Extra-Ocular Section of the Optic and Ciliary Nerves as a Substitute for Enucleation of the Globe,	476
Germ Theory applied to Furuncle, etc.,	571
Influence of the Nervous System on Sweating and Temperature, and of Sweating on Febrile Temperature,	157 °
Intra-Pleural Râles,	370
Japanese Quackery,	284
Morphine and Chloral,	282
Nitrous Oxide Gas in Melancholia and Mental Exhaustion,	376
Pasteur's Investigations of the Cause of "Cholera" in Fowls,	375
Phlyctenular Inflammation of the Vocal Cords,	64
Professor Lister on the Antiseptic Treatment,	68
Removal of Laryngeal Growths by Subcutaneous Operation,	478
Sanitary Organization of Nations,	272
Severe Reflex Symptoms Due to Pressure within the External Auditory Meatus,	474
Sir Henry Thompson on the Nietze-Leitner Endoscope,	278
Sodium Benzoate in the Treatment of Phthisis Pulmonalis,	161
Splint for Compressing and Supporting the Testicle,	373
Syphilis and Marriage,	578
The Cautery and Chian Turpentine in Malignant Diseases of Female Generative Organs,	479
Thomas Keith and Ovariectomy,	472
Effusions, Treatment of Pelvic	1
Electricity, Dosage of	621
Elephant Baby,	623
Endoscope, Sir Henry Thompson on the Nietze-Leitner	278
ENGELMANN, GEO. J., Time of Conception and Duration of Pregnancy,	438
<i>Erb</i> , Pathology of Tabes Dorsalis,	146
Erythema Uterinum,	576
<i>Esmarch</i> , Spasm of the Urethra,	252
Ethyl, Bromide of	276, 573
Extra-Ocular Section of Optic and Ciliary Nerves as a Substitute for Enucleation of the Globe,	476
Extract of Malt,	213
Eye, Effects of Malarial Poisoning upon	543
Eye, Splinter of Wood in, for Forty-seven Years,	360
Fair Ground Association,	522
Fatty Degeneration of Heart from Hemorrhage,	323
Fetus, Length of	419
Fever, A New Type of	197
Fever, Puerperal	13, 183
Fever, Typhoid	422
Fibroid, Removal of Submucous	48
Fistula, Occlusion of	411, 541
Fistula, Uretero-Vaginal	362
Foreign Bodies in Digestive Tract,	514
Foreign Bodies in the Vagina,	418
Fournier, Alfred	218

	PAGE.
Fracture of Trachea,	325
Furuncle, etc., Germ Theory Applied to	571
<i>Galezowski</i> , Ophthalmic Lesions Produced by Cold,	265
Garbage, Disposal of, at New Orleans,	96
Gastric Fistula in a Dog. Spontaneous Closure of	541
German Measles—Rötheln,	534
Germ Theory Applied to Furuncle, etc.,	571
GLASGOW, W. C., Papillomatous Growths in the Vocal Cords of a Child—Successful Removal,	44
Plastic Bronchitis,	109
Globe, Man's Appearance on the	421
Green Soap,	624
Growths, Laryngeal. Removal by Subcutaneous Operation,	478
Growths, Papillomatous, in Vocal Cords,	44
Gums, Hemorrhage from the	205
HAMMOND, W. H., Neuralgia of the Testis,	429
Head, Tumors of the	312
Heart, Fatty Degeneration of, from Hemorrhage,	323
Heart, Valvular Lesions of	212
<i>Heidenhain</i> , Mesmerism,	563
Hemorrhage during Pregnancy,	216
Hemorrhage from the Gums,	205
Hemorrhage, Post-Partum,	221, 400
HENDERSON, R. T., Rötheln, German Measles,	534
Hiccup, Persistent,	417
Histology, Carmine Solution for	215
Hodge Pessaries,	305
HODGEN, J. T., Two Cases of Œsophagotomy,	550
How They Cook Rice in Japan,	421
Hypochondriasis, Syphilitic	319
Idiopathic Abdominal Pulsation.	266
Impermeable Stricture,	553
Index Medicus,	526
Inflammation of the Vocal Cords, Phlyctenular	64
Influence of the Nervous System on Sweating and Temperature, and of Sweating on Febrile Temperature,	157
Injection of Milk and Sugar into the Veins, Causes of Death after,	55
Inquiry—Posture of Women During Labor,	491
Intra-Pleural Râles,	370
Intra-Uterine Variola,	566
Japan, How They Cook Rice in	421
Japanese Quackery,	284
JARNAGIN, W. C., Typho-Malarial Fever,	335
<i>Kanzow</i> , Echinococcus of the Thigh,	352
Keith, Thos., and Ovariectomy,	473
Labor, Posture of Women During	491
Lacerated Cervix,	420

	PAGE.
<i>Lang</i> , Cancer upon Surface Occupied by Lupus,	150
<i>Langenbach</i> , Tabes Dorsalis, Stretching Nerve Trunks in	145
Laryngeal Complications of Sclerosis Cerebro Spinalis-Disseminata,	53
Laryngeal Growths, Removal by Subcutaneous Operation,	478
Laryngeal Papillomata,	310
Laryngology, Archives of	524
Larynx, Closure of, after Diphtheria,	56
Length of the Fetus,	419
Lesions of the Heart, Valvular	212
Lesions, Ophthalmic, Produced by Cold,	265
<i>Létievant</i> , New Method of Operation upon White Swelling,	148
<i>Levinstein</i> , The Morphine Habit,	452
Lister on Antiseptic Treatment,	68
Liver, Abscess of and Ulceration of Large Intestine,	139
<i>Lomikowsky</i> , Laryngeal Complications in Sclerosis Cerebro-Spinalis Disseminata,	53
Longevity,	152
Longevity, Remarkable	621
Lupus, Cancer upon Surface Occupied by	150
<i>Macario</i> , On Idiopathic Abdominal Pulsation,	266
Macroglossa, A Case of	567
Madison County, Illinois, Medical Association,	208
Malarial Affections, The Tongue in	422
Malarial Poisoning, Effects upon the Eye,	543
Malignant Diseases of Uterus, Surgical Treatment in	443, 504
Malt, Extract of	213
Man's Appearance on the Globe,	421
<i>Martineau</i> , Pelvic Lymphangitis and Adenitis following Metritis,	147
MAUGHS, G. M. B., Puerperal Fever,	13
MAURY, R. B., Treatment of Pelvic Effusions,	1
Measles, German	534
Measles, (Rubeola—Morbilli),	531
Meatus, External Auditory, Reflex Symptoms due to Pressure within	474
Medical College, Missouri	325
Medical College, St. Louis	325
Medical Director of Zoölogical Collection,	522
MEDICO-CHIRURGICAL SOCIETY OF ST LOUIS :	
A New Type of Fever,	197
Aspergilla Nigricans,	511
Bright's Disease without Albumen or Tube Casts,	604
Cephalhematoma,	203
Chrysophanic Acid in Psoriasis,	196
Enlarged Clitoris—Rudimentary Vagina,	200
Foreign Bodies in Digestive Tract,	514
Hemorrhage from the Gums,	205
Labio-Glosso-Pharyngeal Paralysis,	204
Laryngeal Papillomata,	310
Non-Union of Radius and Ulna after Fracture,	513

	PAGE.
Occlusion of Fistulæ,	411
Paper and Felt Braces in Curvature of the Spine,	408
Strictures of the Œsophagus,	413
Tracheotomy in Croup and Diphtheria,	307
Tumors of the Head,	312
Melancholia, Nitrous Oxide in	376
Mesmerism,	563
Metritis, Pelvic Lymphangitis and Adenitis following	147
Microscopic Soiree,	216
Milk, Cost of	625
Milk and Sugar, Causes of Death after Injection of	55
Missouri State Medical Association,	599
Monthly Report on Therapeutics, 60, 154, 269, 363, 466,	568
Morphine Habit, The	452
Morphine and Chloral,	282
Mortality Table, 108, 220, 326, 428, 530,	626
MOSES, G. A., Removal of a Submucous Uterine Fibroid,	48
Propriety of Surgical Treatment of Malignant Diseases of the Uterus,	443
MOSES, S. G., Post-Partum Hemorrhage,	221
Murderers, Crania of	353
Myocarditis, Suppurative, in Nephritis,	324
Nations, Sanitary Organization of	272
Necrosis of the Pancreas,	462
Nerve Stretching in Tabes Dorsalis,	145
Nervous System, Influence on Sweating and Temperature,	157
Neuralgia of the Testis,	429
New-Born Child, Treatment of	415
New Method of Operation upon White Swelling,	148
New Orleans, Disposal of Garbage at	96
New Sign of Death by Strangulation,	465
New York, Letter from	378
Nietze-Leitner Endoscope, Sir Henry Thompson on	278
Nipple, Cancer of the Breast following Eczema of	66
Nipple, Disease of	406
Nitrite of Amyl,	420
Nitrous Oxide and Oxygen, Anæsthesia by	555
Nitrous Oxide, Death from	324
Nitrous Oxide in Melancholia and Mental Exhaustion,	376
Non-Union of Radius and Ulna after Fracture,	513
OBITUARIES:	
Budd, William	219
Choppin, Samuel	625
Clarke, Lockhart	427
Copeman, Edward	529
Corrigan, Dominic	427
Hancock, Henry	219
Hunt, Thomas	218

	PAGE.
Lemaire,	427
McDowell, J. J.	426, 527
Porter, J. H.	219
Sharpey, Wm.	626
Scott, Thos.	426
Toland, H. H.	427
Wells, Sælberg	218
OBSTETRICAL AND GYNECOLOGICAL SOCIETY:	
Albuminuric Convulsions,	78
Chronic Convulsions in a Child,	301
Disease of the Nipples	406
Hodge Pessaries,	305
Post-Partum Hemorrhage,	400
Puerperal Convulsions,	302
Puerperal Fever,	183
Surgical Treatment of Malignant Diseases of the Uterus,	504
Trismus Nascentium,	407
Water Bed in Ovariectomy,	509
Œsophagotomy, Two Cases of	550
Œsophagus, Carcinomatous Stricture of the	344, 413
Oleomargarine,	325
Operation upon White Swelling, New Method of	148
Ophthalmic Lesions Produced by Cold,	265
Ophthalmoscope in Cerebral Disease,	525
Organization of Nations, Sanitary	272
ORIGINAL ARTICLES:	
Alcohol in Health and Disease,	234
Measles, (Rubeola—Morbilli),	531
Neuralgia of the Testis,	429
Obligations of Physicians to Courts of Justice,	327
Plastic Bronchitis,	109
Post-Partum Hemorrhage,	221
Propriety of Surgical Treatment of Malignant Diseases of the Uterus,	443
Puerperal Fever,	13
Rötheln, German Measles,	534
Spontaneous Closure of an Artificial Gastric Fistula in a Dog,	541
Time of Conception and Duration of Pregnancy,	438
Treatment of Pelvic Effusions,	1
Typho-Malarial Fever,	325
ORIGINAL LECTURES:	
Stricture of the Urethra,	40
The Effect of Malarial Poisoning upon the Eye,	543
Ovariectomy, Thos. Keith and	472
Ovariectomy, Water Bed in	509
Oxygen, Nitrous Oxide and, Anæsthesia by	555
Pancreas, Necrosis of the	462
Paper Brace in Curvature of the Spine,	350

	PAGE.
Papillomata, Laryngeal	310
Papillomatous Growths in Vocal Cord,	64
Paralysis, Labio-Glosso-Pharyngeal	204
Pasteur's Investigations of the Cause of "Cholera" in Fowls,	373
Pathology of Tabes Dorsalis,	143
Peculiar Diseases of the Skin,	280
Pelvic Effusions, Treatment of	1
Pelvic Lymphangitis and Adenitis following Metritis,	147
Pepsin and Pancreatin,	422
Persistent Hiccup,	417
Pessaries, Hodge's	305
Phantom Tumor in an Ass,	521
Pharmacopœia Convention,	603
Philadelphia, Letter from	285
Phlyctenular Inflammation of the Vocal Cords,	64
Phthisis Pulmonalis, Sodium Benzoate in	161
Physicians, Obligations of, to Courts of Justice,	327
Plastic Bronchitis,	109
Pneumo-Mycosis Aspergillina,	264
Pneumonia, Acute, High Temperature in	525
Pneumonia and Abortion,	210
POLLMANN, L. P., Carcinomatous Stricture of the Œsophagus,	344
Post-Partum Hemorrhage,	400, 221
Posture of Women During Labor,	491
Pregnancy, Duration of, and Time of Conception,	438
Pregnancy, Hemorrhage during	216
Pressure within External Auditory Meatus, Reflex Symptoms due to	474
Prize, Alumni,	523
Prize, The Aubanel,	418
Professor Lister on Antiseptic Treatment,	68
Prophylaxis of Puerperal Septicæmia,	416
Propriety of Surgical Treatment of Malignant Diseases of the Uterus,	443, 504
Psoriasis, Chrysophanic Acid in	196
Public Health Association, The American	95
Public Health Notes,	423
Puerperal Fever,	13, 183
Puerperal Septicæmia, Prophylaxis of	416
Pulsation, Idiopathic Abdominal,	265
Quarterly Epitome,	624
Radius and Ulna, Non-Union after Fracture,	513
Râles, Intra-Pleural	370
Ranula, Treatment of	622
Removal of Laryngeal Growths by Subcutaneous Operation,	478
Removal of Papillomatous Growths from Vocal Cord of Child,	44
Removal of Submucous Uterine Fibroid,	48
Reporting of Cases,	322
Reports on Progress of Therapeutics,	60, 154, 269, 363, 466, 568

	PAGE.
Retarded Dentition,	324
RICHMOND, J. M., Stricture of the Urethra,	40
Rigor Mortis, Ante Mortem	323
Rötheln, German Measles	534
Rudimentary Vagina,	196
Sacrum, Cancer of	57
Sanitary Organization of Nations,	272
Scheuthauer,	214
Schwarz, Uterus Torn Out by a Midwife,	268
Sclerosis, Cerebro-Spinalis, Laryngeal Complication,	53
Section of Optic and Ciliary Nerves as a Substitute for Enucleation of the Globe,	476
SELECTIONS :	
Double Pneumonia and Abortion,	210
Extract of Malt,	213
Iodide of Starch in Lupus Erythematodes,	612
Persistent Hiccup,	417
Phantom Tumor Simulating Pregnancy in an Ass,	521
Prophylaxis of Puerperal Fever,	416
Restoration of Hand after Separation from the Arm,	617
Sigmund on Syphilis,	519
State Medicine,	317
Sulphide of Calcium in Buboes,	614
Syphilitic Hypochondriasis,	319
Transfusion of Blood in Syphilis,	611
Treatment of New-Born Child,	415
Valvular Lesions of the Heart,	212
Sigmund on Syphilis,	519
Skin, A Peculiar Disease of	280
SMITH, I. Z., Obligations of the Physician to Courts of Justice,	327
Society Meetings,	220, 326, 427, 520
SOCIETY PROCEEDINGS :	
American Medical Association,	618
American Medical College Association,	619
American Medical Editors Association,	619
American Public Health Association,	95
Grand River Medical Society of Missouri,	91
Illinois State Medical Association,	596
Madison County, Illinois, Medical Society,	208
Medico-Chirurgical Society of St. Louis,	196, 307, 408 511, 604
Missouri State Medical Association,	599
Pharmacopœia Convention,	603
St. Louis Obstetrical and Gynecological Society,	78, 183, 331, 400, 504
Sodium Benzoate in Phthisis Pulmonalis,	161
Southeast Missouri Medical Association,	594
Southwest Kentucky Medical Association,	602
Spasm of the Urethra,	252
Spine, Paper Brace in Curvature of the	350
Splint, A New Form of	382

	PAGE.
Splint for Compressing and Supporting the Testicle,	373
Splinter of Wood in the Eye for Forty-Seven years,	360
Spontaneous Closure of Artificial Gastric Fistula in a Dog,	541
State Association,	488, 523, 599
State Medicine,	317
STEELE, A. J., Paper Brace in Curvature of the Spine,	350
<i>Stoerk</i> , Complete Closure of Larynx after Diphtheria,	56
Strangulation, New Sign of Death by,	465
Stricture of the Oesophagus, Carcinomatous	344, 413
Stricture of the Urethra	40, 553
St. Vincent Asylum,	526
STUDER, E. J., Case of Impermeable Stricture,	553
Sulphuric Acid Excreted,	423
Subcutaneous Operation, Removal of Laryngeal Growths,	478
Superstition, A Strange	216
Surgical Treatment of Malignant Diseases of the Uterus,	443, 504
Sweating, Influence of Nervous System on, and Influence on Tem- perature,	157
Syphilitic Hypochondriasis,	319
Syphilis, Sigmund on	519
Syphilis and Marriage,	578
Tabes Dorsalis, Nerve-Stretching in	145
Tabes Dorsalis, Pathology of	146
Temperature, Influence of Nervous System and Sweating upon,	157
Testicle, Splint for Supporting and Compressing,	373
Testis, Neuralgia of	429
THERAPEUTIC NOTES—DISEASES :	
Anemia, Alkalies in	364
Arthritis, Iodoform in	369
Asthma and Angina Pectoris, Nitro-Glycerine in	469
Asthma, Hydriodic Acid in	568
Bed Sores, Chloral for	63
Burns and Scalds, Oil of Peppermint for	363
Bronchitis, Acute, Antimony and Dover's Powder in	364
Cancer, Atropia in Pain of	60
Cancer, Chian Turpentine in	479
Catarrh, Iodoform in	62
Chancroids, Iodoform in	60
Constipation, Belladonna in	368
Convulsions, Enema Against	364
Coryza, Eucalyptus in	271
Cough of Pregnancy, Sympathetic,	369
Cough Remedy, Oxalate of Cerium as a	570
Diabetes, Nitrate of Uranium in	568
Diarrhea,	365
Diarrhea, Chloral and Oxide of Zinc in	363
Diarrhea, Mercuric Bichloride in	269
Diarrhea, Salicylates in	366

	PAGE.
Diphtheria, Oxalic Acid in	569
Dysentery, Ixora Dandanea in	156
Dysentery, Mercuric Bichloride in	269
Eclampsia, Puerperal, Veratrum Viride,	466
Eczema Marginatum, Iodized Phenol in	156
Epilepsy, Borax in	468
Erysipelas, Carbolic and Oleic Acid in	470
Flagging Heart, Digitalis in	271
Hooping Cough, Bromide of Potash in	155
Hooping Cough, Inhalations in	269
Herpes, Powder for Ulcers of	471
Hystero-Epilepsy, Apomorphia in	468
Intermittents, Quinidia Combination for	366
Melancholia and Mental Exhaustion, Nitrous Oxide in	376
Migraine, Nitro-Glycerine in,	469
Naso-Pharyngeal Polypus, Interstitial Injections in	156
Night-Sweating of Phthisis,	270, 368
Ophthalmia, Nitrate of Silver in	68
Pertussis, Inhalations in	155, 269
Pharyngitis, Chronic, Iodoform in	62
Phthisis, Cosmoline in	569
Phthisis, Night-Sweating of	270, 368
Polypus, Naso-Pharyngeal, Injections in	156
Pregnancy, Sympathetic Cough of	369
Psoriasis, Chrysophanic Acid in	196
Pulmonary Disease, Crude Petroleum in	570
Puerperal Eclampsia, Veratrum Viride in	466
Respiratory Diseases, Carbonate of Ammonia in	470
Rheumatism, Apium Graveolens in	270
Rheumatism, Iodide of Potash and Opium in	471
Rheumatism, Milk in	367
Ringworm, Treatment of	471
Rosacea of the Face,	365
Sea Sickness, Remedies for	470, 569
Skin, Chlorate of Sodium in Inflammations of the	368
Small Pox, Carbolic Acid in Eruption of	568
Tænia, Aspidium Marginale for	365
Tetanus, Indian Hemp in	361
Tonsillitis, Nitrate of Silver in	62
Typhoid Fever, Iodine in	271
Typhoid Fever, Nitro Muriatic Acid in	156
Typhoid Fever, Treatment of	61
Urticaria, Belladonna in	62
Whooping Cough, Inhalations in	155, 269

THERAPEUTIC NOTES—REMEDIES.

Aconite in Puerperal Eclampsia,	466
Alkalies in Anemia,	364
Ammonia, Carbonate, in Respiratory Diseases,	470

	PAGE.
Anti-Diarrheic Potion,	365
Antimony and Dover's Powder in Acute Bronchitis,	364
Apium Graveolens in Rheumatism,	270
Apomorphia in Hystero-Epilepsy,	468
Aspidium Marginale for Tænia,	365
Atropia for Pain of Cancer,	60
Belladonna in Chronic Constipation,	368
Belladonna in Urticaria,	62
Blood, Defibrinated, Substitute for Beef Extract,	469
Borax in Epilepsy,	468
Bromides in Sea-sickness,	569
Bromide of Ethyl,	276, 573
Bromide of Potash for Hooping Cough,	155
Carbolic and Oleic Acids for Erysipelas,	470
Carbolic Acid for Small-pox,	568
Chian Turpentine in Cancer,	476
Chloral,	467
Chloral for Bed-Sores,	63
Chloral in Infantile Diarrhea,	363
Chlorate of Sodium in Inflammations of Skin and Mucous Membranes,	368
Chrysophanic Acid in Psoriasis,	196
Collodion Film, A Tenacious,	63
Cosmoline in Phthisis,	569
Digitalis as an Anaphrodisiac,	63
Digitalis in Flagging Heart,	271
Enema against Infantile Convulsions,	364
Eucalyptus in Coryza,	271
Glycerine, Tonic	569
Gossypii, Liq. Cort. as a Galactagogue,	365
Hydriodic Acid in Asthma,	568
Indian Hemp in Tetanus,	367
Inhalations in Hooping Cough,	155, 269
Injections for Naso-Pharyngeal Polypus,	156
Iodide of Potash in Rheumatism,	471
Iodine in Typhoid Fever,	271
Iodoform for Chancroids,	60
Iodoform in Catarrh,	62
Iodoform in Chronic Arthritis,	369
Iodoform in Gynecological Practice,	154
Iodized Phenol in Eczema Marginatum,	156
Iron, Dialyzed,	61
Ixora Dandanea in Dysentery,	156
Mercuric Bichloride in Dysentery, etc.,	269
Milk in Rheumatism,	367
Nitrate of Silver in Ophthalmia,	63
Nitrate of Silver in Tonsillitis,	62
Nitrate of Uranium in Diabetes,	568

	PAGE.
Nitro-Glycerine in Migraine, Asthma, etc.,	469
Nitro-Muriatic Acid in Typhoid Fever,	156
Nitrous Oxide in Melancholia and Mental Exhaustion,	376
Oxalate of Cerium as a Cough Remedy,	570
Oxalic Acid in Diphtheria,	569
Peppermint Oil for Burns,	363
Petroleum in Pulmonary Diseases,	570
Pilocarpine in Night Sweating of Phthisis,	270
Quinia Combination for Intermittents,	366
Ricinus Communis as a Galactagogue,	467
Salicylates in Diarrhea,	366
Salt as an Aperient,	270
Silver, Nitrate of, in Ophthalmia	63
Silver, Nitrate of, in Tonsillitis,	62
Turpentine, Chian, in Cancer,	479
Veratrum Viride in Puerperal Eclampsia,	466
Therapeutic Review for 1879,	153
Thompson, Sir Henry, on the Nietzsche-Leitner Endoscope,	278
Todd, C. A., Accumulation of Cerumen Simulating Chronic Bronchitis,	71
Spontaneous Closure of an Artificial Gastric Fistula in a Dog,	541
Tongue in Malarial Affections,	422
Trachea, Fracture of	325
Tracheotomy in Croup and Diphtheria	307
TRANSLATIONS :	
Anæsthesia by Nitrous Oxide and Oxygen,	555
Anthropology—Crania of Murderers,	353
Cancer of Sacrum,	57
Cancer upon Surface Occupied by Lupus,	150
Causes of Death after Injection of Milk and Sugar into the Veins,	55
Cerebro-Spinalis Disseminata,	53
Complete Closure of Larynx after Diphtheria,	56
Echinococcus of the Thigh,	358
Idiopathic Abdominal Pulsation,	266
Laryngeal Complications in Sclerosis,	53
Longevity,	152
Necrosis of the Pancreas,	462
New Method of Operation upon White Swelling,	148
New Sign of Death by Strangulation,	465
Ophthalmic Lesions Produced by Cold,	265
Pelvic Lymphangitis and Adenitis following Metritis,	147
Pneumo-Mycosis Aspergillina,	264
Remarkable Case of Early Viability,	151
Spasm of the Urethra,	252
Splinter of Wood in the Eye for Forty-Seven Years,	360
Tabes Dorsalis, Pathology of	146
Tabes Dorsalis, Stretching of Nerve Trunks in	145
The Morphine Habit,	452
Uretero-Vaginal Fistula,	362
Uterus Torn out by Midwife—Recovery,	268

	PAGE.
Treatment, Lister on the Antiseptic,	68
Treatment of Pelvic Effusion,	1
<i>Triedberg</i> , A New Sign of Death by Strangulation,	465
Trismus Nascentium,	407
Tumors of the Head,	312
Typhoid Fever,	422
Ulna, Non-Union of Radius and, after Fracture,	513
Uretero-Vaginal Fistula,	362
Urethra, Case of Impermeable,	553
Urethra, Spasm of,	252
Urethra, Stricture of,	40
Uterine Fibroid, Removal of,	48
Uterus, Malignant Disease of, Propriety of Surgical Treatment,	443, 504
Uterus Torn out by a Midwife—Recovery,	266
Vaccination, Animal,	70, 164
Vagina, Foreign Bodies in the	418
Vagina, Rudimentary,	197
Valvular Lesions of the Heart,	212
VAN EMAN, J. H., Abscess of the Liver and Ulceration of the Large Intestine,	189
Variola,	419
Vaseline as a Basis for Unguents,	289
Veins, Death after Injection of Milk into	55
Viability, Remarkable Case of	151
Viburnum, Prunifolium,	217
Vienna, Letter from	482
Vital Statistics, Convention of	426
Vocal Cords, Papillomatous Growths in	44
Vocal Cords, Phlyctenular Inflammation of	64
Vol. I. No. 1,	217
Walsh's Retrospect of American Medicine and Surgery,	526
Water Bed in Ovariectomy,	509
<i>Weichelbaum</i> , Pneumo-Mycosis Aspergillina,	264
<i>Weimar</i> , Splinter of Wood in the Eye Forty-seven years,	360
<i>Weiss</i> , Case of Cancer of the Rectum,	57
White Swelling, New Method of Operation,	148
Zinc, Sulphate, for Cancer,	524

ST. LOUIS COURIER OF MEDICINE

—AND—

COLLATERAL SCIENCES.

VOL. III.

JANUARY, 1880.

No. 1.

ORIGINAL ARTICLES.

THE TREATMENT OF PELVIC EFFUSIONS.

By RICHARD B. MAURY, M. D., MEMPHIS, TENN.

PELVIC effusions of serum and pus, in the female, are the result of two distinct forms of inflammation.

In one of these, the products of inflammation, fibrine, serum and pus, are effused upon the surface of the pelvic peritoneum, and furnish the anatomical appearances which are characteristic of pelvic peritonitis.

In the other form, the structure invaded is the cellular tissue underlying the peritoneum, and surrounding the various pelvic viscera. In the beginning, there are exudation of serum and infiltration of this tissue, as we see occurring in cellulitis elsewhere. Later, the products of inflammation assume the form of pus, and there is a breaking down of the proper structure of the tissue, and disappearance of the fibrillar intercellular substance.

The walls of cavities containing pus, resemble, anatomically, a granulating surface, and when the pus is evacuated,

they come together, and often unite quickly. The circumstances which surround pelvic abscesses, notwithstanding the contrary view entertained by some, seem to me especially favorable to the coming together, and adhesion of their walls. Failure of these cavities to close up, after evacuation of their contents, is probably due to their being imperfectly drained.

In considering the subject of surgical treatment, it is necessary to have as clear an idea as possible, of the anatomical relations which these effusions bear to the adjacent structures. These relations differ in the two forms of disease before us.

In cellulitis, deposits of pus are surrounded by walls of indurated cellular tissue.

In peritonitis, accumulations of serum or pus are found enclosed by walls, made up of agglutinated portions of uterus, ovary, bladder or intestine.

Before proceeding to a discussion of rules for treatment, the following illustrative cases are presented.

CASE I.—In December, 1878, a married woman, 37 years of age, by occupation a nurse, came under my care for the treatment of pelvic inflammation. Her child was then 8 years old. She had been in fair health, until ten weeks previous to my visit. For two weeks she had been confined to bed with fever, pain and exhaustion. Pulse, 115 per minute. Temperature from 100° to 102°, F. She complained especially of pains through the pelvis, running down into the right hip and thigh; of frequent and painful micturition, and of difficulty in getting any passage from the bowels.

A large tumor occupying the right half of the abdomen, rose above the umbilicus, and extended about two inches to the left of the median line. Indistinct fluctuation was thought to be appreciable, upon palpation through the abdominal wall.

Examination showed that this tumor was presenting at the roof of the vagina to the right of the uterus. It could not be felt as a pelvic tumor, but there was a point of

hardness and resistance in this locality, which bi-manual examination proved to be offered by the abdominal tumor.

The uterus was pushed extremely forward against the pubic bone by another tumor, soft and elastic to the touch, which occupied the pelvis, and lay between the uterus and rectum.

An exploring needle introduced into the pelvic tumor gave issue to a few drops of clear serum. When pushed through the point of resistance in the right *cul de sac* of the vagina, into the abdominal tumor, it revealed the presence of pus.

Regarding the case as one in which both cellulitis and peritonitis existed, the serous accumulation in Douglas' pouch was left to take care of itself, because these serous effusions generally undergo ready absorption; while, with a Dieulafoy's aspirator, something more than three pints of pus were drawn through the roof of the vagina. The abdominal tumor had now entirely disappeared. There was left only a small hard mass in the right hypogastrium. The pelvic tumor remained as before.

In about ten days, the pelvic tumor also had disappeared; and in one month, the patient was restored to health, with no trace of her disease, further than a hardened spot in the roof of the vagina, and some loss of uterine mobility.

CASE II.—A few weeks after case I. presented itself, a lady who had been for eight months under the intelligent care of Dr. Bell, of Randolph, came to Memphis for change of scene and medical aid.

I found her feeble, greatly emaciated, and suffering from hectic. Her pulse was 115 per minute, her temperature from 101° to 102° F., with night sweats and occasional chills. For several years she had had pneumonia every winter; and during the whole of the last winter, she had suffered from inflammation of the lung, which was accompanied with profuse purulent expectoration, fevers and night sweats, and her friends thought she had consumption.

These symptoms were removed, and about eight months

before she came to Memphis (nearly one year after the birth of her child), she was attacked with pelvic inflammation; and since that time had been confined to her room.

She complained of pelvic pain and difficult micturition. Had menstruated only two or three times during the past year.

Physical exploration revealed great emaciation. The chest walls were flattened, but no evidences of lung disease were discoverable.

In the left hypogastrium, there were pain and resistance upon pressure. Percussion resonance somewhat impaired over the same region. The whole pelvic roof, explored through the vagina, was tender and resistant upon pressure. The uterus of normal depth, and in nearly natural position, was immovable.

On the left, and very close to it, was an area of induration. No tumor could be made out; but there was an irregularly shaped area of hardness and resistance on left of the womb, made clear upon bi-manual exploration. Fluctuation could not be detected.

Feeling convinced of the presence of pus, I first etherized the patient, and then introduced an exploring trocar close to the uterus on the left. Pus came through it. When the instrument was removed, a continuous stream of blood followed, which would not be stopped by pressure, showing that the venous plexus had been opened. The large trocar was then passed, and the aspirator attached, and one pint of thin, unhealthy, stinking pus was removed. Warm carbolized water was then passed through the cavity of the abscess, until the stream returned clear.

The trocar being removed, an attempt was made to pass a sea-tangle tent, but the opening was not direct, and the tent could not be passed.

High fever, cough and diarrhœa followed this operation, within a few hours.

Though the local symptoms were all relieved, and the pelvic pain and bladder difficulties removed, the patient did not improve much.

The intestinal discharges contained nothing like pus, and there was nothing to indicate discharge of the abscess into the bowel; but diarrhœa, cough and fever continued. It looked as though the old lung symptoms had taken the place of the pelvic.

I felt certain that this abscess would refill, and have to be re-opened. It however did not do so. Three weeks after aspirating, thinking that some hidden collection of pus might be keeping up the constitutional disturbance, I again etherized the patient, and with the assistance of Dr. Edward Mitchell, who had aided me the first time, made a most thorough pelvic exploration, with a view to again aspirating, if I could find even a suspicious point; but nothing could be found to justify such a procedure.

I should state here that the symptoms were not now those of hectic, but were continued fever, with evening rise of temperature, and diarrhœa.

The patient was now advised to return home. I did not think she would live long.

Her father died of consumption. Her mother was delicate and died young.

This lady is, however, still living, one year from the date of the emptying of the abscess, and though in feeble health, goes about her home.

CASE III.—On Dec. 10th, '79, I saw, in consultation with Dr. Batte, a patient whom he had attended in confinement on August 2nd, '79.

The labor was natural, and matters went well until three weeks afterwards, when the woman was seized with rigors, pain, high fever, and all the symptoms of acute pelvic inflammation. She was confined to bed for several weeks, and was very sick. She then grew better, and left her bed, but still had fever.

Six or eight weeks previous to our consultation, she began to suffer with chills and night sweats; and an abdominal tumor was discovered.

At the date of my visit, the pulse was 120, temperature 102.5° F. The tumor was of symmetrical shape, extended

as high as the navel, and occupied the whole of the lower part of the abdomen. It was immovable, very hard, and excessively tender to the touch. Upon palpation through the abdominal wall, fluctuation was made out. Vaginal touch discovered the *cervix uteri* about the middle of the pelvis. The uterine body could not be outlined, but the sound was introduced to the depth of three inches, and revealed retroversion of the organ, with an inclination to the right side.

Douglas' *cul de sac* was not invaded by inflammation. The vaginal roof was clear of inflammatory deposits, but the abdominal tumor was discovered, presenting high up, and in the neighborhood of the right sacro-iliac symphysis.

Fluctuation could not be obtained from bi-manual manipulation through the vagina.

This tumor did not come down into the pelvis, but it offered resistance to pressure, made upward through the vaginal roof, over an area of about one inch in diameter.

The patient having been etherized, Drs. Batte and Edward Mitchell assisted me in drawing off 14 ounces of thick, bad smelling pus.

Making gentle pressure over the abdomen, during the process of evacuation, so as to empty the abscess thoroughly, the sac seemed to flatten out and form a thick cushion over the pubic bone.

Forty-eight hours after the operation, the sac had assumed a globular form, the size of the fist. The patient had been comfortable in every way, her pulse 90 per minute and temperature 98° F.

One week after operating, the pulse was 72, temperature normal, and the sac of the abscess soft and smaller than at last report, could still be felt above the pubis. There was no tendency to reaccumulation of pus. Patient's condition satisfactory in every respect.

CASE IV.—This patient, who was brought to me by Dr. Leake, of Collierville, on June 8th, '79, had not been well for four months. She was married the last of December, and being thinly dressed, got very cold, but did not know

that she experienced any ill effects. The next day menstruation came on, and lasted one week as usual. Six weeks afterwards, she was seized with severe abdominal pain while cooking. This continued all day. Her courses were over due, and she succeeded in bringing them on by teas and foot baths. The flow then lasted for three weeks. The pain which she felt at first all left her, and she has had none since.

Since this time, which was early in March, she had had irregular hemorrhages, and lost flesh. Pulse at time of my examination was 96, temperature 98.5° F. No history of fever or inflammation could be obtained. Examination revealed a hard inelastic swelling of irregular shape, filling almost the entire pelvic cavity, encroaching greatly upon the rectum, apparently adherent to the sacrum on the right side, and pushing the uterus forward against the pubes. This swelling extended lower, and filled the pelvis more completely on the left side, than on the right. It was found to rise two inches above the pelvic brim on the right.

The womb, four inches in depth, was movable by the sound, was in front of, and not a part of the tumor. Most careful vaginal and rectal exploration failed to discover fluctuation or softening. There was no tenderness about the tumor. Micturition and defecation were not interfered with. The breasts were not enlarged or otherwise changed. The absence of any constitutional disturbance at this time, and, so far as Dr. Leake could learn, at any previous time since the beginning of the trouble; and the absence of all pain or tenderness after the freest manipulation, made us feel that this tumor was not composed of inflammatory products.

On June 25th she returned to Memphis, and was under my observation for several days. I came very near aspirating the tumor at this time, but the patient was feeling so well that I advised non-interference for awhile longer.

I did not see her again until November 23d, when, upon examination, I found the swelling entirely gone, the uterus

returned to its place, and its mobility almost completely restored. She said that three weeks after my examination in June, she began to pass pus and blood in considerable quantities from the vagina. This was a peritonitic tumor. I was never more at a loss in diagnosis. Aspiration would have cleared it up.

Fortunately, nature did all that was possible in the case.

In none of the cases here reported, did the abscess point, or show a tendency to open upon any surface.

In Case I., a bistoury might possibly have been thrust, with safety, through the vaginal roof, but I did not think so.

In cases II. and III., I do not think any surgeon would have been willing to use the knife.

In cases I. and III. the pus was thick, the walls of the abscess tender, the temperature and pulse high.

For these reasons, I did not think it best to throw any fluid into the cavity, after removing the pus.

In case II. the grade of fever was low, and the pus was thin and unhealthy, and carbolized water was used to wash out the cavity.

TREATMENT.—Authorities are not agreed as to the course which should be pursued, in dealing with pelvic effusions.

Some discourage surgical interference altogether, proposing to leave the effusion entirely to nature. Others are positive in teaching that it should be evacuated, under certain circumstances. Few, with whose writings I am acquainted, give explicit rules as to the time and conditions, under which interference is proper.

Becquerel, quoted by Duncan, says the abscess is never to be opened, even though its apparent pointing in one situation, should seem to invite interference.

Dr. McClintock reports 13 cases of pelvic abscess, puerperal in their nature; and 11 cases from non-puerperal inflammation, all of which were left to nature, except 3, in whom the abscess pointed through the abdominal wall, which, when so thin as to be on the point of giving way, was opened with the lancet. Four of these patients died

from rupture of the abscess into the bowel, and the uncontrollable dysentery which followed. Three died from rupture into the peritoneum. A very heavy mortality.

West, Bernutz, and Aran declare against the expediency of the early opening of these collections of matter, and the two last insist "that there is no evidence of the possibility of preventing, by the artificial opening of these purulent collections, the formation of spontaneous openings in other situations, and especially the peritoneal cavity."

The teaching of Schröder, like that of McClintock, is practically to leave these abscesses to nature.

In 1860, Dr. Simpson said: "I feel perfectly sure that in any case, it is better carefully to watch the progress of the suppuration, and to take it into your own hands, to make a proper artificial opening for the discharge of the abscess in a safe and suitable situation, than to leave the guidance of it to nature, and run the risk of seeing the purulent collection burst into some dangerous or disagreeable locality."

In answering the question *when* such an abscess should be opened, Dr. Simpson practically says, not yet, withhold your hand, it is better not to open too early, wait as long as seems to you safe. In fact Dr. Simpson does not answer the question, *when*.

Thomas is the first authority, so far as my information goes, to propose, under certain circumstances, the evacuation of collections of serum in pelvic peritonitis. He lays down a safe and wise rule to this effect: "If the patient be doing well, and don't suffer from the local trouble, it should be left to empty itself spontaneously. If on the other hand, the patient suffer from the collection, and be not progressing favorably, it should be evacuated."

In regard to the treatment of pelvic abscess, he says: "Should an abscess in the pelvis show a rapid tendency to point, and discharge through a favorable channel, at the same time that no distressing or dangerous symptoms show themselves, it would be the part of wisdom, to wait the action of nature, for all must admit that there are few localities in the body, into which it is more haz-

ardous to cut than this. Even under these circumstances, there is danger in delay."

"This danger, as evidenced by statistics, is not great; and as experience goes to prove that the knife is employed too early rather than too late, I should strongly recommend the delay of surgical interference, until the presence of pus is an absolute certainty. The answer to the question of the propriety of interference resolves itself into this: if the pus can be certainly reached, it should be evacuated; should the abscess be deeply seated, on the other hand, so as to make the operation difficult and uncertain, it would expose the patient to hazards greater than those attendant upon delay."

"This subject is one upon which no fixed rule can be given. The surgeon must weigh the dangers of operation with those of delay, and decide by the indications presented in each individual case."

The whole of Matthew Duncan's advice upon the subject may be summed up in the following: After speaking of the boldness demanded in opening old pelvic abscesses, he says, "but these are not the only cases that appear to me to demand operative interference, and I find it difficult to do more than assert the propriety of it in pelvic abscess, as in any other surgical case." "If matter is certainly formed in considerable quantity and has no vent; if the abscess is mature; then the surgeon should look forward to early artificial evacuation."

Duncan reports two cases in which he tapped serous accumulations forming a tumor between uterus and rectum.

Dr. D. Warren Brickell, of New Orleans, published an exceedingly interesting and valuable article on the "Proper Treatment of Pelvic Effusions," in *Am. Jour. Med. Sciences*, April, '77, and reported therein two cases of abscess, and seven of serous effusion, which he had treated most satisfactorily by tapping through the vaginal roof.

Dr. Brickell's conclusions are:

1. There are two distinct forms of pelvic inflammation serous and suppurative.

2. Should serum or pus be deposited in the pelvis, evacuation is the proper practice.

3. Either should be evacuated per vaginam.

4. The presence of pus in any portion of the body, is not to be tolerated. The presence of effused serum in the pelvis, is not to be tolerated either. As long as it is present, there is the abiding stimulus to repeated inflammation, and the pelvis can and will be ravaged.

5. Topical applications, and internal remedies have no influence on serous effusions.

I now proceed to give my own conclusions, arrived at by a careful study of the experience of the distinguished authors whom I have quoted; and by the observation of quite a large number of cases of pelvic effusions, both serous and purulent, which have come under my care:

1. Caution and judgment are eminently demanded in the treatment of pelvic effusions; and in the management of pelvic abscesses, we should wait until maturation is complete, and simply assist nature, by making an incision, as early as we are satisfied, she has clearly indicated the point of opening. This is demanded of us, in order to lessen the risks of a rupture into the peritoneum or bowel.

2. Inasmuch as many pelvic abscesses do not point at all, and manifest no tendency to open of their own accord, surgical means must be employed to make a way for their evacuation.

3. Generally, these abscesses can be reached through the vagina, and whenever the effusion presents, at the vaginal roof, so that it may be felt as a resisting body, (it is not necessary that it should come down into the pelvis) it may be evacuated by the trocar. In rare cases these tumors present only in the rectum, or through the abdominal wall, and can not be reached through the vagina.

4. Whenever we are satisfied of the existence of pus, and that ripening of the abscess has occurred, and thinning of the wall can be discovered, let us open it at once.

5. When we can not, by physical signs alone, prove the presence of pus—as is often the case—but believe it to be

present from the constitutional symptoms, chills, fever, night sweats, we should not hesitate to explore the pelvic roof, or rectal or abdominal wall, by aspiration, and remove the effusion without delay, wherever found.

6. The great majority of serous effusions will disappear under the influence of rest, and counter-irritation.

The very few which continue, in spite of medical measures, should be treated upon the principles which govern us, in the management of similar effusions into the pleura.

7. Should such an effusion into the pelvis remain unabsorbed, three or four weeks after the beginning of the attack, and all acute symptoms have subsided; and especially if pain and a feverish condition be present; we should not hesitate to carefully aspirate the pelvic roof, with a delicate trocar, and remove the effusion.

8. In practice we are often unable to tell, from the patient's history, how long the effusion has been present, especially if the case has been sub-acute, or chronic from the beginning; but we may always with propriety aspirate, if the condition is not one of acute inflammation, and we are satisfied of the inutility of remedies.

PUERPERAL FEVER.

BY G. M. B. MAUGHS, M. D., ST. LOUIS.

[Read before the St. Louis Obstetrical and Gynecological Society, Dec. 18, 1879.]

AMONG the many discussions of learned societies big with moment to our race, there are but few of more importance than, when in 1875, the London Obstetrical Society convened for the discussion of the six questions or propositions, of Spencer Wells, concerning the relation between puerperal fever and septicæmia or blood poisoning. And, while no definite view was arrived at, there was presented such an array of facts and arguments in favor of the septic or zymotic origin of this disease, as to leave the connection between it and septicæmia in most, and their absolute identity in many cases, no longer a matter of doubt; or if any practitioner in the future should entertain a doubt as to their identity in many cases, at least his earnest attention must be given to the fact that they may be thus related.

No disease has been more prolific in theories, richer in literature, more doubtful in its etiology or pathology, or uncertain and unsatisfactory in its treatment, than the so-called puerperal fever.

Unlike many other important diseases, its history has not its beginning in modern times, being graphically described by the Father of Medicine; whilst the disease itself has existed in all ages and among all peoples, claiming a victim here, another there, throughout all historic and pre-historic times to the beginning of our own race, and as its ravages are not confined to the human female, being possible to all placental mammals, it doubtless antedates our race by millions of years, and yet it is only within the last few years that its nature and origin have been generally under-

stood. Practically even now we fear they are but little known, or are ignored by many practicing physicians.

That this is so, is a sad commentary upon our profession, as it would, perhaps, not be possible in the progress of arts and science, to instance a like case, in which the advance of a truth, once clearly enunciated and readily confirmed by the observance of facts daily occurring, has been so slow or doubtful.

Beginning with the history of medicine, Hippocrates very clearly described the disease. In his "First Book of Epidemics," it is said that "the wife of Dromeades, the second day after a favorable confinement, had a chill, followed by a high fever. The lower portion of the abdomen began to be painful the first day of the fever, with nausea, sleeplessness and a sense of alarm. The second day after the chill her bowels were moved naturally. Her urine was acrid; thick and white, but deposited no sediment; no sleep. Third day about noon had another chill, followed by high fever, urine as before, nausea, the flanks painful, a bad night; no sleep. She had a cold sweat but grew warm again. On the third day the pain in the hypochondrium easier, but the head was painful, with drowsiness; she was thirsty, with a qualmish stomach; about noon was delirious, but became rational again. The eighth day, early, she had another chill, followed by a rise of fever, sweated all over, with cold extremities; grew delirious, with deep heavy breathing, and soon after died in convulsions." Each of us perhaps could hang this picture, taken 2300 years ago, upon the wall and mistake it for one of our patients, so life-like is it. The woman died of puerperal metro-peritonitis, with septicæmia. In the following, the cause as well as the symptoms are clearly given. If then, we have only lately determined the nature of puerperal fever, or its connection with pyæmia, it is not because our attention has not been directed to it, as this undoubtedly is as old as Hippocrates, who says: "In Tarsus a woman, living near the cold spring, after being delivered of a daughter, and *not well cleansed* (that is, portions of the after-birth was not removed), were taken with an acute

fever and chilliness on the third day. After the chill, the fever became high and continuous, with a sense of alarm, and shivering. On the eighth and ninth day she was delirious, but became rational again. This woman after suffering from pyæmia with multiple abscess, died, worn out, on the eighteenth day from her confinement."

Here is a well described and unmistakable case of auto-genetic poisoning from retention of some portion of the after-birth, the cause and effect, and yet we are just now, 2300 years after the lucid recital of these type-cases, beginning to appreciate them. Men's views, as expressed in their theories, change, and some diseases change, but nature changes not; and puerperal fever being founded in the very nature of the puerperal state, changes not.

Of course no one now cares what Hippocrates believed or did not believe, as it would not in the least influence our opinions or practice, yet this clear observance of phenomena, and vivid and truthful description of the symptoms and progress of disease, and accurate apprehension of its cause, should as certainly have prevented this oblivion into which this disease seems to have fallen in subsequent ages, as it has given the author an immortality that brightens with the ages. And yet, for more than 2,000 years following the description of these cases it was scarcely mentioned, certainly nothing was added to our knowledge concerning it. And not until the establishment of general lying-in hospitals in Europe, the first of which was the Hotel Dieu, in Paris, is the disease mentioned as an epidemic. The first accurate account of puerperal fever is given us in connection with this hospital, in 1746.

But as the silence of authors for 2,000 years following Hippocrates is no evidence that the disease did not exist during this time, so its not being mentioned by any one as an epidemic previous to its occurrence in 1746, in Paris, is not to be taken as evidence that it had not presented itself in this form, only that there was wanting some one of sufficient intelligence to record it.

DEFINITION.

“Every fever,” says Dr. Kirkland, 1774, “which arises from any diseases, in consequence of pregnancy or delivery, and happens during the time of lying-in, may properly be called a puerperal fever.”

This definition is evidently too inclusive, as it would embrace many diseases not considered puerperal fever—such as milk fever and many ephemeral fevers happening at this time.

Many authors have thought it a peritonitis—a metro-peritonitis, a metro-phlebitis, or many or all of these united in the same case. Dr. Meigs was among this number, as well as Gorden, of Aberdeen. That these phlegmasiæ are present in most cases of child-bed or puerperal fever is well known, and that they are sufficient to account for the death of the patient in many fatal cases, is a fact equally admitted, but that something more than these phlegmasiæ is present in almost every case, is the opinion of most observers. This is believed to be septic matter introduced into the blood, causing, not resulting from, the local inflammations. Dr. Meigs, in his zeal to combat an almost forgotten theory, milk-metastasis, denied septicæmia or pyæmia as a producing cause, or the disease itself, was forced to involve suppurative phlebitis to account for the undeniable fact of blood poisoning.

“Under the term puerperal fever we place all those diseases of puerperal women which are caused by the absorption of septic matter, that is, organic substances, in the process of decomposition.”—*Karl Schræder*.

This definition, while stating the most frequent cause of puerperal fever, is too exclusive, as it makes every case *ab initio* a puerperal septicæmia, which view, though adopted generally in Germany and by Playfair and some others in England, is we believe incorrect, inasmuch as puerperal fever may, and sometimes does arise, from causes not admitting a belief in septic matter. The substitution of the term puerperal septicæmia as Playfair has

done, while clearly stating a very frequent cause, can, we believe, never receive general sanction, for the reason that it is untrue in fact. The belief in an essential fever, confined to the puerperal state, distinct and separate from other forms, as typhus and typhoid fever, has now but few adherents in this country. Dr. Barker is perhaps the only notable adherent of this now exploded theory.

While it is doubtless true that puerperal fever is often a septicæmia, the septic matter originating within the system, or introduced from without, in either case the septicæmia constituting the essential nature of the disease, it is equally true that in other cases the disease has its origin in causes utterly independent of septic matter, as traumatic lesions, cold, mental state, etc.; here the essence of the disease being in the conditions present in the puerperal state, which puerperal condition stands as the only common factor for correllating many unlike causes in the one effect—puerperal fever. It is thus manifest, to give such a definition as expresses fully our ideas of the disease is hardly possible, and while not exactly the idea we may have of puerperal fever, we think that given in the nomenclature of diseases by the Royal College of Physicians of London, is as comprehensive as our present knowledge of the disease will permit, “a continued fever, communicable by contagion, occurring in connection with child-birth and often associated with extensive local lesions, especially of the uterine system.”

CAUSES OF PUERPERAL FEVER.

Puerperal septicæmia refers to a cause, the introduction into the system of septic matter. The definition we adopt permits causes. These causes are both endogenous and exogenous—that is, they exist, or are produced, by conditions within the system, auto-genetic, auto-infectious, or they are produced from without, hetero-genetic, hetero-infectious.

So far from self-production of the disease, *auto-infection*

being a matter of surprise, the wonder is that it is not much more frequent, considering that the physiological conditions of the puerpera so nearly touch the pathological state, even in the most natural labor. After labor all the conditions are present most favorable for the production and absorption of putrescent matter. First, for its production we have necessarily present in the uterine cavity and vagina more or less blood clots, with some shreds of decidua and particles of placental tissue, while the uterine sinuses contain more or less thrombi, always present to a greater or less extent, after the most fortunate delivery and most complete contraction and condensation of the uterus—these within a few hours fall into a state of degeneration and constitute a portion of the lochia. How readily all these conditions are intensified by inertia and flooding, or in many cases where these conditions have not been marked, are facts well known to the accoucheur. And that all the conditions are present for the absorption of any septic matter that may be present—such as the raw surface of placental site, while the other portions of the internal surface of the womb are in a condition to offer but a feeble resistance to the impress of deleterious agents, being partially denuded of its epithelium, and protected only by an imperfectly formed layer of largest new formed cells that after infection or at the impress of infectious matter, readily break down, even falling into a gangrenous condition, while at the same time more or less tears and abrasions exist along the genital tract, are all well known facts.

And then, during gestation, the woman's blood is loaded with effete matter, the result of the necrobiotic processes going on in her own system and that of her infant, while it is impoverished by the excessive demand made upon it by the two systems. After parturition, in addition to this, there is involution of the reproductive system, through a destructive fatty metamorphosis, in which organic tissues are melted down and removed from the system in a state

but little removed from pus—much of which is thrown into the blood vessels, thereby pressing her blood still closer upon the pathological, while the uterus, in the act of melting down, crowded with disintegrating cells, is being built up by matter passing from the dead to the living state, which is replacing matter passing from the living to the dead state, to an extent nowhere else found in the living system, except, perhaps, in rapidly granulating ulcers. These new-formed, scarcely-living, only becoming, together with the old, scarcely dead, only dying cells are so little able to resist morbid influences, often present, such as mental depression, cold, etc., etc., that auto-infection, would be of much more frequent occurrence were it not that the reparative action, established in the raw surfaces, found existing in every case after labor, is of such a nature as to lessen the danger of absorption.

Everywhere in these lesions throughout the genital tract, placental site, and in the uterine cervix and vagina, after a few hours, plastic lymph, as in granulation, is thrown out, that protects the system from septic absorption, so that by the third day the woman is, in almost every case, protected against the passing over these surfaces of lochia, that would almost certainly kill her, had it been present during the first twenty-four hours. If then puerperal women are not oftener killed by auto-infection, it is not because the poisonous elements are not present in almost every case, but because they are not present until she is locally guarded against their absorption.

But it is not necessary in all cases for the production of puerperal fever, that the woman be poisoned by the absorption of matter from within or without. Given the blood conditions previously referred to, it may only be necessary that from some traumatic lesion or other cause, a rise of temperature is produced, or, what might amount to the same thing, from some mental state, the vitality is lowered, to cause a blood dissolution, putrescent state. I believe this border line between the physiological and pathological

blood states is sometimes thus crossed. Otherwise how is it that young women, the victims of seduction, are most apt to have puerperal fever? And we are quite certain we have seen it produced by the injudicious use of cold water or ice applied to the abdomen to arrest *post partum* hemorrhage.

Independently of the remedies often resorted to in *post partum* hemorrhages, puerperal fever from auto-infection is much more likely to occur in women who have had such hemorrhages. Not that the loss of blood itself has any connection with the fever, but the hemorrhage is either the result of, or causes inertia, imperfect uterine contraction, whereby an undue amount of thrombi are in the uterine sinuses; and then clots are almost necessarily in the uterine cavity after exhaustive hemorrhages, and then these, undergoing decomposition, the septic matter the more readily enters the system through the patent uterine sinuses. Certain it is, some of the worst cases of puerperal fever from auto-infection, occur after exhausting *post partum* hemorrhage.

We can readily see how all causes tending to lessen uterine contraction, whether they be hemorrhage or mental states, not only intensify the cause, but lessen the resistance to puerperal fever.

That the retention of pieces of placenta or membranes is a cause of puerperal fever, auto-infectious puerperal fever, was recognized and clearly taught, as we have seen, by Hippocrates, and has been confirmed by the superabundant testimony of all modern observers. And yet these are, often present, together with the horribly offensive discharges to which they give rise, without producing puerperal fever. The reason for this has been given in the non-absorbing properties of granulating surfaces.

The heterogeneous sources of infection are not only much more often the source of poisoning, but these cases are more rapidly fatal and less amenable to treatment. The system offers a resistance to, or familiarity with self-pro-

duced poisons, assimilating them to itself or eliminating them, much greater than to those introduced from without, bearing up under a tangible quantity of the one, while it readily succumbs to an infinitesimal dose of the other.

The first to teach that puerperal women could be poisoned by the hand of the accoucheur or nurse, was Denman. Certain as this now appears, and often as it has been fatally demonstrated, like many other truths, it was slow in gaining universal acceptance.

This was, perhaps, owing to two reasons. First, many were determined not to believe it, could not afford to believe it, because before the days of antiseptics, they would be compelled, for a while at least, during attendance upon a puerperal fever patient, to give up their obstetrical practice, thereby suffering loss. The other class was composed of able and conscientious men, whom no earthly consideration could have induced to wilfully endanger a life entrusted to their care, but who with minds prepossessed with other views, found an argument against its contagious nature in negative facts. Among the ablest of them was our distinguished Dr. Meigs, who, in despite of all the positive testimony given by a cloud of witnesses, of its communicability denied its communication in this manner, because he had known instances of exposure without the disease being communicated, and strange enough, instances Dr. Rutter of Philadelphia, in whose practice the disease appeared again and again, even after long absence from practice and great and unusual care to disinfect himself. Now it turns out that Dr. Rutter had an ozæna the septic discharges from which inoculated and killed the very women that Dr. Meigs kindly passed over to the category of providences.

The fearful epidemics, so-called, of puerperal fever in the lying-in hospitals of Vienna, traceable directly to cadaveric infection by students leaving the dissecting room to attend women in labor, and which were at once prevented

by forbidding such attendance; the cases given by Gordon and multitudes of trustworthy witnesses when the disease was carried from one woman to another by the physician, midwife or nurse; the numerous instances in which it occurred with frightful certainty and fatality in the practice of one physician or midwife, while it occurred not at all in the practice of others crossing their lines of practice in every direction and in the closest proximity, together with the superabundant other proofs that have been given of its communicability, have placed its contagiousness beyond the possibility of doubt. And so important and clear are these facts that professional practice is now being directed by enlightened public opinion which holds that physician culpable who remembers not its communicability.

All the so-called epidemics of puerperal fever that have ever occurred in hospitals, cities or the country, have been produced in this way, or have occurred during and on account of, the prevalence of erysipelas, scarlet fever, diphtheria, etc. Puerperal fever as such never did, and in its very nature never can, occur as an epidemic.

We have witnessed one so-called epidemic during the prevalence in Howard county in this state, in 1854, of an epidemic of erysipelatous sore throat.

The first case of this epidemic occurred in a pregnant woman, living near Rocheport—I attended her. She aborted and died. There was no appearance of erysipelas externally.

The nurse who was with her, lived some eight or ten miles from where the patient died. On returning home she waited on a woman in labor, who shivered next day and died in a few days after with puerperal septicæmia—internal puerperal erysipelas. The child died with erysipelas. The disease now rapidly spread among the attendants of these two cases, and became epidemic throughout the eastern and middle portions of the county, and while during its entire prevalence, I refused to attend any woman in labor, I was kept

painfully busy attending to those who had been waited on by other physicians or midwives, or who were confined in the house where some one had erysipelas, or were nursed by women who had been in contact with erysipelas. And while fortunately, from the early effort at isolation, there were not a great many cases of puerperal fever—puerperal erysipelas,—I do not remember a single case where a woman was exposed to the contagion during her confinement, or immediately after and escaped an attack, nor do I recollect a single case so attacked that recovered—all perished rapidly, hopelessly perished with the symptoms of septicæmia.

Only the other day I met one of our most intelligent physicians, who stated that “He had been busy, having quite a number of cases of erysipelas in his practice.” I remarked that he would soon have puerperal fever in his practice. He said he “had already had a case.” I remarked, she died of course. He answered, “She did, and while she presented no manifestations of erysipelas, her child died a few days after with erysipelas.”

So close is the relation between erysipelas and puerperal fever, that most writers have noticed the prevalence of erysipelas during puerperal fever epidemics, and the frequent presence of puerperal fever during epidemics of erysipelas.

Virchow has termed puerperal septicæmia—“internal malignant erysipelas.” Are they not correlated states? Is not erysipelas communicated to a lying-in woman, puerperal fever? Puerperal septicæmia, the contagion of which, when affecting a non-puerperal person, produces erysipelas, is correlated back into erysipelas.

A few years since, I saw, in consultation, a number of cases of puerperal fever—hetero-genetic in their origin, and in connection with erysipelas, which was prevailing at the time. There was also at this time an unusual prevalence of scarlet fever, diphtheria, small pox, etc. That the contagion of scarlet fever and diphtheria may produce puer-

peral fever in a lying-in woman, appears to be, if not fully established by the observation of Braxton Hicks and others, at least rendered so probable as to demand the utmost care in avoiding such exposure. I have always looked with alarm upon the exposure of a lying-in woman to the contagion of scarlet fever.

That the poison of this and all other zymotic diseases when brought in contact with the lesions in the genital tract of a woman recently delivered, may produce puerperal septicæmia which, affecting a non-puerperal person through the respiratory organs may be correlated back into scarlet fever, diphtheria, etc., is most reasonable. All zymotic conditions are fermentative states of the blood, readily tending to putrescence, and when coming in contact with the blood of the puerpera, find all the conditions present for septicæmia or pyæmia.

The influence of organic forms, as bacteria, in producing or extending this disease, it is not yet possible to determine. Most probably they are present only because they find in the altered blood state a favorable nidus for their rapid multiplication. Further inquiries will be necessary to determine the relation between their presence and puerperal septicæmia.

Pathology.—This, while tending to a similitude through the uniformity of the blood state of the puerpera, yet differs so greatly in its more apparent manifestations in different cases, especially in different so-called epidemics, as to give prominence to the name and treatment, by different authors.

With some, the most prominent symptoms during life, and anatomical changes discoverable after death, were a supposed putrescence (Hulme); with others, as Alexander Gordon, in the puerperal fever at Aberdeen, peritonitis, and metro-peritonitis were the most marked phenomena during life, and these were confirmed by the pathological changes discoverable after death.

During the winter of 1869 and 1870, quite a number of

fatal cases occurred at the City Hospital. At the same time erysipelas was in the wards, killing a number of patients, and rendering it dangerous to perform the slightest surgical operation. I assisted in a number of *post mortem* examinations of women dying at this time, of puerperal fever, and exhibited several uteri to the class. These were all cases of hetero-genetic poisoning, rapidly fatal, some of the women dying within four or five days after delivery. In all, we had the most marked proofs of metro-peritonitis—the omentum and mesentery were often melted down, the intestines agglutinated together, and a large quantity of sero-purulent fluid in the abdominal cavity. In the walls of the uterus were invariably found purulent abscesses; in several, one or more of these had broken into the abdomen. The mucous membrane was, in several, in a state of mortification, presenting a black, pultaceous mass; in some instances patches of mortification, had extended quite through the uterine parietes to the peritoneum. All of these cases were probably due to the presence, in the wards, of erysipelas, and belonged to the “internal malignant erysipelas” of Virchow.

Schroeder believes that puerperal fever is always caused by blood poison, introduced in nearly every case from without, producing first marked changes at the point inoculated, which rapidly extending, involve the uterus (metritis), the uterine connective tissue, (parametritis), then the abdomen, (peritonitis); and, in cases where a sufficiently large dose has been introduced into the system, the patient may die of the blood poisoning, before any distinct macroscopical changes have taken place—the pathology of the disease is septicæmia.

In cases not arising from blood poisoning, but traumatic lesions—especially extensive lacerations of the cervix—we have metritis and parametritis, and lymphangitis, with extensive lymphatic thrombosis. These lymphatic thrombi degenerating, break up and enter the circulation, adding to the general disorder, so that we may have produced in

these traumatic cases, a blood state, not differing from that of primary blood poisoning. A like blood state may be produced by the degeneration and breaking up of the thrombi in the uterine sinuses, which, entering the circulation, may result in embolism, or septicæmia. Or, without any of these causes of blood poisoning, we may have a like state from a rise of temperature, caused by some local inflammation, which acting upon the puerperal blood state, may produce a condition simulating or being either pyæmia or septicæmia.

That puerperal fever is not always or necessarily, septicæmia, we have the authority of Buhl, and accepted by Klob, whose anatomical classification of puerperal fever, gives three forms. "The first, represented by *puerperal peritonitis, without pyæmia*, is developed from endometritis, by extension through the oviducts to the peritoneum. The second, by *puerperal pyæmia, without peritonitis*, is developed in the form of traumatic pyæmia; the primary affection is again *endometritis*, with the absorption of ichorous or fetid substances into the veins and thrombi of the uterine veins, especially at the point of placental attachment, this form might therefore be termed puerperal pyæmia, with phlebitis. The third form is *puerperal pyæmia with peritonitis*, or *pyæmia, with lymphangitis*, endometritis, in this, the most malignant form of puerperal disease, extends to the lymphatics.

These are the cases of internal, malignant, puerperal erysipelas, of Virchow, and such were the cases witnessed in the City Hospital.

With such a pathology, or with such varied pathological conditions, founded on a general type, whose only common factor is the puerperal blood state, we readily see why different accurate observers should give it different names, according as one or another of these conditions were most marked—as puerperal peritonitis, puerperal metritis, puerperal metro-peritonitis, puerperal metro-phlebitis, puerperal septicæmia, etc.

That the disease, while owing to the puerperal blood state, has in all cases a tendency to putrescence, septicæmia, this condition in many cases being initiatory, does differ in different cases, is thus placed beyond a doubt; and that this septic tendency, necessarily present in puerperal fever, may exist only potentially, never being *in esse* and may be produced in the non-puerperal condition, but here is always the result of septic poisoning, is we believe an undoubted fact.

Some years since I saw in consultation, a non-puerperal patient dying, with all the symptoms of puerperal septicæmia, caused by the use of sponge tents.

Treatment.—That a disease of such fearful portent, possessing a common generic type, yet differing as we have seen, so widely in its most characteristic pathological lesions, should have received so varied and directly opposite treatment, all alike satisfactory, or the reverse, in like or unlike cases, having an inextricable maze through which the searcher for the cure of the disease might wander in vain, returning with no substantial good or present views to reward his search, is most natural.

And yet through our more enlightened views of its general pathology, and more especially its etiology, we are now approaching sure grounds, and may reasonably hope that soon death from this, heretofore, formidable danger of the lying-in room will be of rare occurrence, while anything approaching the frightful epidemics, such as swell the pages of its modern history and fill us with alarm at the impotence of our art, will be unknown and unfear'd.

But while our treatment of this disease is founded on more rational views and will certainly cure many cases that previously would have perished, yet it is not so much in the more successful treatment, as in its prevention that the greatest good promises in the future. And for the general and more accurate understanding of its etiology and nature, the medical profession is indebted more to Spencer Wells' six propositions or questions and their discussion

in the London Obstetrical Society, than to any other source. For while much of the knowledge brought out in that discussion had long been accepted, and, indeed, clearly taught by the few, especially in England and Germany, it was this that forced its importance upon the profession throughout the world, and arrested the attention of the public to vital facts that will permeate the entire community, until a physician will be held responsible for neglecting those precautions necessary to prevent, or arrest the spread of the disease.

The auto-genetic form of the disease occurs sometimes as we have stated under pathology, from the unavoidable or unknown retention within the genital tract, of portions of placenta or membrane, but most frequently from the presence of decomposing clots within the uterus or vagina, or the decomposition of thrombi, which according to Klob, are always present in the uterine sinuses at the placental site; and these clots and thrombi we know are greater in proportion as the womb is imperfectly contracted, as in cases of inertia, or post-partum hemorrhage, as in those cases the woman is often prevented bleeding to death not more by uterine contraction than by the coagulation of blood in the uterine sinuses, often aided or rendered possible by the slackened circulation caused by the enfeebled heart action, as in syncope; clearly then the indication is to procure as perfect uterine contraction as possible. This is best done by the careful management of the third stage of labor. Having followed down the uterus with the hand upon the abdomen during the expulsion of the child, continue gentle pressure until the return of expulsive pains; continue the pressure with the hand until the uterus separates and expels the placenta together with any clots that may be present, then give \mathfrak{z} i Squibb's fluid extract ergot, and continue gentle pressure with the hand until the womb is well within the pelvis, hard, not larger than a small fetal head and shows no disposition to relax, then apply a compress and bandage firmly. In cases of great inertia

with hemorrhage an invaluable hemostatic is washing out the uterine cavity with hot water, 110° F., or injecting tincture of iodine. If the former has been used at the close of the hemorrhage, it has had the additional great good of washing out any clots that may have been present; if the latter, by its powerful antiseptic properties, the putrefaction of any clots within the uterus is prevented. In either case much is done toward securing the woman against auto-infection.

If, however, in despite these precautions, or through their neglect, the discharges become offensive, showing the decomposition of some foreign substance, we must resort immediately to the careful washing out of the uterine cavity with warm water, glycerine and carbolic acid, and continue this until the returning fluid is clear and without odor; and these intra-uterine injections must be repeated as often as is necessary to keep the discharges odorless.

With this treatment, almost no woman would suffer from puerperal fever, produced by auto-infection. But, suppose the woman, from some cause, has the auto-genetic form of puerperal fever. She has had a chill or a sense of chilliness, a rise of temperature to 103° or 105°, offensive lochia with a sense of soreness, or acute pain in the hypochondrium, with a pulse of 120 to 140 to the minute. There is here blood poisoning, from the absorption of septic matter from the uterus or some other portion of the genital tract, and while she is more tolerant of this self-produced poison than if introduced from without, and may, and most likely will, eliminate a dose of this that would certainly destroy her, if of heterogenetic origin; yet, if she is permitted to continue absorbing ichorous matter, she must succumb to blood poisoning. Her salvation then depends upon immediately cutting off the supply, and this most fortunately we can now certainly do. No time is to be lost in thoroughly washing out the uterus with antiseptics. One of the severest cases I ever saw recover, was in a most interesting and lovely woman, who was prostrated by the

absorption of an overwhelming dose of self-produced septic matter. In this case all the conditions most favorable for self-poisoning were present to an intense degree. She had been attended in her labor by a most intelligent and experienced accoucheur, who, in the third stage, had to combat uterine inertia, either caused by, or associated with, undue attachment of the placenta, which had to be separated and removed by the hand introduced into the uterus. But so close was the attachment that it had to be removed in pieces, and after persistent and intelligent efforts, it was found impossible to remove every portion, small pieces still remaining attached to the uterine surface. A fearful hemorrhage accompanied and followed this procedure, and in despite the most skillful treatment, it was not until after the patient had been alarmingly prostrated that the hemorrhage was controlled. Here, then, we had all the conditions present and intensified for self-poisoning. The uterus was imperfectly contracted; clots were in its cavity; its sinuses contained an inordinate quantity of thrombi, and there were present adherent portions of placenta that must speedily become putrescent, which separating, would leave fresh raw surfaces and gaping veins for the ready absorption of septic matter, while the empty condition of the vascular system intensified, quickened absorption. The result was that within twenty-four hours she had a severe chill, followed by a temperature of 105° or 106° and a feeble, rapid pulse of 150, together with a fearfully offensive vaginal discharge.

The fear was that this patient would sink immediately from the blood dissolution produced by the magnitude of the dose of poison. The indications were certainly to cut off the supply, and if possible sustain the patient until the poison could be eliminated. For the former purpose the uterus was immediately washed out with warm water and glycerine with five grains of carbolic acid to the ounce; large quantities of offensive, rotting pieces of placenta and decomposing, putrid blood clots were washed out, and the

injection continued until the water returned clear and without odor. The internal surface of the uterus was now painted over with tincture of iodine, and the patient placed upon quinine, brandy, egg-nog, milk-punch and beef-tea. The system was too adynamic for veratrum viride; and to control the heart's action and assist the anti-pyretic properties of the quinine, a heart-tonic, tinct. digitalis, ten drops every three hours was ordered. Besides assisting to lessen the heat, the last remedy was indicated to prevent a heart-clot, for the production of which all the symptoms were present in an intense degree.

The good effects of this treatment were manifest next morning in the pulse being fuller and stronger and only 90, and in a fall in the temperature of 2° . This treatment was persisted in, the uterus being washed out with the disinfecting fluid and painted with iodine and glycerine by the attending physician as often as was necessary to prevent any offensive odor in the discharges. It is manifest this was rendered necessary much less frequently by the subsequent use each time of the iodine, and yet was repeated three or four times in the twenty-four hours. Under this treatment the patient slowly improved. For many days her life hung by a very doubtful tenure, with scarcely a hope of her recovery; but she was finally so far recovered as to be pronounced convalescent, when embolism took place in the femoral artery, by which she lost a foot, with this exception her recovery was complete, and she is now, twelve months after the attack, in robust health.

Fortunately, these cases of self-infection are rare, and by the means previously pointed out, can be almost entirely driven from practice. The reason for their comparative infrequency, even in badly managed cases of labor, is found in the puerperal state; as in this, the conditions most favorable or indeed necessary for self-infection, do not usually appear in any considerable force until the second or third day, by which time the absorption of septic matter is prevented by the reparative process set up in the

lesions of the genital tract, always present after delivery. For granulating wounds do not readily absorb, and probably those cases of auto-genetic puerperal septicæmia (and I have seen several in consultation) that occur as late as the sixth or eighth day, are produced by some movement of the woman or handling of the nurse abrading granulating wounds, thereby presenting a raw surface for the ready absorption of septic matter, perhaps always present at this time in the lochia, or it may be the result of a very partial lymphangitis, with lymphatic thrombosis, which breaking up and entering the circulation may produce blood poisoning.

If from any cause, the condition of the lochia always present, even in the most healthy state, on the third day, existed on the first day after confinement perhaps, few women would survive the puerperal state.

In cases of heterogenetic septicæmia, which are much the more frequent, the prevention again is infinitely the most important part of the treatment, and this consists, first, in placing the woman in the most favorable hygienic surroundings. If possible, she should be confined in a well ventilated room, free from all miasms, such as unhealthy emanations from drains and sewers, etc., and apart from all zymotic diseases, as measles, scarlet fever, diphtheria and more especially erysipelas, as the parturient woman brought, in any manner, within the atmosphere of erysipelas will almost certainly contract the puerperal form of the disease, and doing so, will hardly escape death, as internal puerperal erysipelas is more fatal than any plague.

These are the so-called epidemics of puerperal fever, in which all have died. Wm. Hunter lost thirty-one out of thirty-two cases, and says, "treat them as we will, three out of four will die."

The accoucheur, after attending any of these cases of zymotic diseases, or a case of puerperal fever, or a *post mortem*, or dressing an offensive suppurating wound, should never visit a lying-in woman without the most careful dis-

infection, such as washing his hands in water containing tinct. iodine or carbolic acid, or Condy's solution, taking a bath and changing his clothes, or such other precautions as promise absolute security against the possibility of poisoning his patient. If he has not time or opportunity to do this, he should have some other physician attend the patient, or in a case not likely to happen, better, far better let the woman be confined with no other assistance than what may be given by some female friend or stranger who has had children. A wanton departure from this is criminal, and enlightened public sentiment will soon make it a felony. But it is ignorant midwives that are much more likely to sin in this particular than physicians. They must be taught better, and, if necessary, the law should make them feel that "cleanliness is next to godliness." But in cities, it is, I believe, not even ignorant midwives that are the greatest sinners in this respect, but careless, filthy, "monthly nurses" who, even though they have been told better, will leave the bedside of a scarlet fever or diphtheria patient, or wear the same clothes in which they have nursed a puerperal fever patient, recently dead, or only now recovering, to nurse our patient.

I not unfrequently feel alarmed at the appearance of one of these "monthly nurses," and if she has not already been with and handled the patient, I invariably question her as to where she has been; what she has been doing the last several days; and whom she attended last; how she did.

But unfortunately, they will often lie terribly, and we are compelled to let our patient take the risk. Then, again, many of these professional nurses cannot smell, or readily lie when asked concerning the discharges, thinking it would be an imputation against their watchfulness and immaculate knowledge to admit that the discharges were offensive or bad-smelling. The physician, therefore, unless he knows the nurse, should himself observe the napkins and see that the discharges are as they should be.

If, through the neglect of, or despite these precautions,

the woman has puerperal septicæmia from heterogenetic infection the intra-uterine washes are again of the first importance, for while the same conditions, the presence of decomposing animal matter, as blood clots, pieces of placenta, etc., may not be present to the same extent as in auto-genetic cases, yet the discharges rapidly become poisonous, and by their absorption may still further endanger the life of the patient. And then, though introduced from without, either by the hand of attendants, or by the absorption of peccant gases, whether it has been introduced through some traumatic lesion, or been absorbed directly through the mucous membrane of the genital tract, the point of absorption always becomes inflamed. Thus we always have in puerperal septicæmia, *endometritis*. And then the mucous membrane of the womb, as we have seen, is at this time in a condition least able to resist morbid impressions, and falls readily into a state of putrescence. With this the antiseptic injections come in immediate contact. The good effect of this is readily manifested in the fall of temperature following their use. They should always be used, and their use persisted in, repeating them, if necessary, every three or four hours, while the surface of the uterus may be painted over with tinct. iodine two or three times, daily. From ten to fifteen grains of quinine, with from a fourth to a third of a grain of morphine, may be given two or three times a day. Or, as the disease is most probably associated with one of an erysipelatous nature, we may give quinine and muriated tinct. iron—five grains of the former and twenty or thirty drops of the latter may be given every four or six hours, and continued with an increase or diminution of the dose as indicated, as long as may be necessary. The pulse may be controlled with tinct. digitalis, ten drops, three times a day. The digitalis is better in these adynamic cases than *veratrum viride*, and as the object is in all cases to assist nature in eliminating the poison and supporting the patient until this is effected, if the bowels are not loose, they should be moved occasionally with an emul-

sion of castor oil, aided or substituted, if necessary, by oil and turpentine enemata. The supporting diet with stimulants, as indicated, should be instituted and diligently persisted in. If they are remitted or neglected, or given up, the patient may die to-night. If, by their persistent exhibition, she can be kept alive until morning, who can say she may not recover?

The temperature that of itself would kill the patient must be lessened, and to assist the antipyretic remedies named, cold applied externally is an invaluable remedy. It may be applied by ice cold water in bags to the head and spine, and when the skin is dry, by sponging the body with cold water.

We have now been considering cases of puerperal septicæmia. But while all cases caused by infection are necessarily septicæmic in character and most of those produced by traumatic lesions, if not cut short, cured by active treatment, become so; we have other cases in which septicæmia is not present, except in an advanced stage of fatal cases, and these are isolated cases of puerperal peritonitis, or puerperal metro-peritonitis, occurring outside of hospital wards or crowded tenement houses in country districts, in women in previous good health.

These cases are ushered in with a severe chill or rigor, followed by greatly increased heat 102° to 105° , frequent pulse 120 to 140, with frequent breathing, with pain and tenderness in the abdomen. These attacks usually commence on the second or third day, but I have known them caused by imprudent exposure on the sixth or eighth day. The pain in the abdomen rapidly increases to an agony, the abdomen is now tympanitic, often distended with gases until it is larger than before confinement; on account of the pain and difficulty in respiration, this is increased in frequency, to thirty or forty in the minute. Vomiting is nearly always present, adding to the distress of the patient; at first only the contents of the stomach, as water and mucus are thrown up; soon this vomiting is of bile, and this

in fatal cases deepens in color until the ejecta are dark or coffee grounds in appearance. The patient generally lies on her back, with her knees drawn up, but I have seen them throughout the attack lie with the limbs extended, or on either side. The bowels are most frequently obstinately constipated on account of the paralysis of their muscular coat, caused by the inflammation of the peritoneum; sometimes, however, there is a troublesome diarrhea, caused by the extension of inflammation to the mucous coat.

If the disease goes on from bad to worse the abdominal tympanitis increases until, by its pressure upon the diaphragm respiration is so much impeded that the blood is imperfectly aerated, increasing the distress and danger of the patient. If the disease is not checked, it may soon pass into mortification, in which case there is no longer pain or soreness upon pressure and the apparent improvement may be so great as to delude the friends and even the patient into the belief that she is getting well, when, indeed, she only has a few hours to live.

The most characteristic feature in this form of puerperal fever is the pain and soreness which are always present in the hypogastric region. In some cases the pain is not violent, but there is always soreness, tenderness in the region of the uterus. Perhaps in nearly all these cases the inflammation commences in the uterus or the pelvic peritoneum when, if it is not checked by appropriate treatment, it rapidly extends over the abdomen. To differentiate these cases at an early stage, and even before the chill in some cases, the tenderness of the womb or pelvic region upon pressure is invaluable, for as stated by Hippocrates, "an inflammation of the uterus may be known by the touch." I have known this form of puerperal fever caused by the excessive purging, produced by an over dose of castor oil.

The treatment in these cases, to be successful, should be instituted early, while the metritis and peritonitis

are only partial, and should be commenced by free venesection. These are the cases that almost never occur in the wards of a lying-in hospital, and never here, or any where else, during an epidemic, so-called, that is, when produced by or under zymotic influences; consequently, the failure of venesection in hospitals, or during the general prevalence of the disease, as all such cases are adynamic *ab initio*, while these are sthenic in character, and only become asthenic through the destructive progress of the disease, is no argument against the lancet in appropriate cases. But to be efficient, or indeed admissible as a rule, it must be resorted to early, within the first twelve hours. When thus used, I have seen it arrest the inflammation and cure the patient in the most unmistakable manner. Many years since I was called to see a hearty, robust servant woman of Gov. Jackson's, near Fayette. She had been confined some thirty-six hours previously; doing well until a few hours before I saw her; had a severe chill, followed by great heat, pain and soreness in the lower abdomen, which was slightly tympanitic; temples throbbing, eyes red, and frequent, hard pulse. I immediately bled her from the arm to thirty ounces, gave her a Dover's powder, and she was entirely well in a few days. I have seen other cases in the country where venesection had a like happy influence. In cases where general blood-letting is hardly admissible, we may substitute leeches. A few years ago, a lady of wealth in this city, did so well after her confinement, that on the eighth day thereafter, she got into her carriage and went to Fourth street on some important business. On returning home she had a severe chill, with violent pain and tenderness in the hypochondrium; pulse 120, temperature 102°. I immediately ordered fifteen or eighteen leeches to the lower abdomen, gave her an opiate, and in a few days she was well.

After blood-letting, or without resorting to this, when from any cause or loss of time an adynamic state contraindicates it, we may resort at once to morphine, as opium

is the sheet anchor in all peritoneal inflammations. Give the patient from one-fourth to one-half grain of morphine every two or three hours, increasing or diminishing the dose as occasion may require. She should, however, be brought decidedly under the influence of the opiate, and kept so continually, until she is convalescent, gradually withdrawing it when no longer required. It would be difficult to over estimate the good effects of opium in this form of the disease. First, it allays nervous excitement, it relieves the pain, it places the bowels in splints, it produces sleep, so necessary and often absent in this condition, and then it prevents the too rapid exudation of plastic lymph; which may be organized as fast as exuded, and its breaking down into pus prevented.

At the same time the heart's action must be controlled; for this purpose we may give tincture veratrum viride from three to four drops every two hours until the pulse is reduced to 80 or 90, and it must be kept at this rate during the continuance of the febrile stage of the disease. To reduce the temperature, give quinine in ten to twenty grain doses morning and evening. Hot turpentine stupes, prepared by wringing a flannel cloth out of hot water, and pouring on it one or two ounces of turpentine, applied over the abdomen, are of great benefit, and when there is much tympanitis should never be omitted. If the distention of the bowels is very great, the good effects of the turpentine stupes may be greatly aided by enemata of warm water, oil, and turpentine to move the bowels, after which they should be again put in splints with opium.

It is of the first importance to stimulate and support the patient; for this purpose we may give egg-nog, milk-punch, brandy, beef-tea, chicken-soup, mutton-broth, soft boiled eggs, and with this treatment we may reasonably hope to rescue a large proportion of cases. But I do not believe that with any treatment, so large a proportion as estimated by Dr. Barker, of N. Y.,—four out of five—ever will recover. In all the cases I ever saw, both in private

practice, hospital, or in consultation, I am satisfied not more than one-third recovered — probably not so many.

But puerperal fever may not be dependent upon any of the causes named; neither ichorrhæmia, septicæmia, pyæmia, nor traumatic lesions, as tears or bruises of uterine tissues, nor cold or other causes producing idiopathic metro-peritonitis, or puerperal-peritonitis.

Some years ago I saw with Dr. Papin a most interesting patient, the second night after her delivery. She had some hours previous a sense of chilliness, followed by fever. When I saw her, there was some fullness of the abdomen, slight pain, and marked tenderness upon pressure in the hypochondrium; tongue coated, with a tendency to dryness in the middle; temples throbbing, pulse 120, temperature 106° , with confusion of ideas, amounting to slight delirium, that had alarmed the nurse and family; nausea, with some vomiting of bile, added to the distress of the patient; urine, high-colored; bladder, not distended. Now, if this was not puerperal fever, what was it? There was no fullness or hardness of the breasts, that would enable us to refer it to so-called “weed,” or milk fever. And yet, after carefully examining the patient, it was believed this incipient puerperal fever was due in some manner to the changes connected with the establishment of the milk secretion, and as her bowels were constipated, she was ordered ten grains each of calomel and jalap, and five grains of each to be repeated every three hours until thorough purging was produced.

The medicine operated promptly, producing five or six offensive discharges, and the patient's condition was so much improved that nothing more was necessary, and in a day or two she was well.

Now, of course, no one will contend that in this case, this commencing puerperal fever was caused by septicæmia or traumatic lesions, and yet had she not been purged in the prompt manner she was, will any one deny that she would soon have had blood-poisoning, ushering in all the

horrors of puerperal septicæmia? The heat alone in this case, acting on the puerperal blood state, would have sufficed to do this. Septicæmia, then, in puerperal fever, may be an accident, or it may not be present at all, and if so, then puerperal fever cannot be defined by puerperal septicæmia.

ORIGINAL LECTURES.

STRICTURE OF THE URETHRA.

(*Clinical Lecture, Delivered in the St. Joseph City Hospital*):

By J. M. RICHMOND, A. M., M. D.

Gentlemen :—I have so recently spoken to you on stricture of the urethra, that I will not now go into details as to its definition, varieties, causes, etc., but simply develop the salient points as we find them in the patients, whom I now present.

CASE I.—J. J., age 24; bachelor; herdsman. *Has never had gonorrhea.* About three years ago was hurt on the pommel of his saddle; passed blood from the urethra, and had trouble in urinating. He recovered from the effects of this, but, in course of time, his stream diminished, urination became painful and frequent, and there was quite a gleet discharge, from which he has, as yet, gotten no relief, though, to use his own language, “he has spent his two horses and all in doctors’ bills.”

You can see from his appearance that his trouble is beginning to tell upon his general health. And ere long, organic lesions may develop, for which we can offer but little help. I have examined his urine, and find no evidence of kidney dis-

ease, but there is chronic cystitis. He has been taking alkaline diluents and has just had 10 grains of quinine with $\frac{1}{4}$ grain morphia. On examining his urethra, the first thing you observe is a contracted meatus. Remember, in handling the bulbous bougies, which are the best means for detecting stricture, always start with the largest size possible, carrying it on until it meets with obstruction or enters the bladder. A No. 9 is the largest this meatus will admit, and as it hangs on traction, showing the web-like and natural appearance of the tissue, demonstrates that the stricture is most probably congenital and not cicatricial in its origin. These congenital narrowings of the meatus may exist for an indefinite time without causing irritation, or they may be sufficient of themselves to cause great trouble in the urinary track. On advancing the No. 9, it is arrested in the fossa-navicularis. The No. 8 is admitted and passes with difficulty through an annular stricture, which, by our manner of marking, measures, nearly one-half inch. Now we advance the No. 8 which meets with no further resistance until near the bulbo-membranous junction. This it will not pass. The No. 7 is also resisted, but a No. 6 passes easily, and on into the bladder. This stricture is also annular, but not as broad as the one in front.

Thus far what have we learned? That the patient has three strictures, all due, most probably, to a different origin—and neither to that most frequent of all causes—*gonorrhea*.

The *first* congenital, the *third* traumatic, and the *second* what? Why, listen to the patient's account, and let it make a lasting impression on you when dealing with a urethritis from whatever cause. He says, "that one of the doctors consulted, told him he could stop that discharge on him, and gave him a twenty grain solution of caustic to inject with, and it made him *pass blood*." So the three strictures are accounted for, and to my mind correctly. Sometimes we doubt our patients in these matters, but this man is far away from his home in Texas, and could have no object in deceiving me, besides my judgment agrees with his account.

What are the indications of treatment? Restore the urethra to its normal calibre, or as near it as possible, and the consequences of the obstruction will gradually disappear, provided we are not mistaken in believing there is no permanent organic

lesion present. What are our means? Gradual dilatation, urethrotomy and divulsion. Gradual dilatation, when practicable, is best. But strictures, at or very near the meatus, where we have two in this patient, do not respond kindly to dilatation. The rule is to cut when in the pendulous portion, and dilate when in the fixed. Traumatic strictures frequently require divulsion, but I propose gradual dilatation for this deep stricture, divulsion, should I find it necessary, or using the divulsing urethrotome should it prove resilient. But, in order to deal thus with the deep stricture, it is necessary to get rid of the obstruction in front. So I will use the meatome in cutting the two first. This is a good instrument when the stricture is within the first inch or more of the meatus.

I fix the meatome so as to cut to the capacity of an 18, as I must allow for a little contraction. I oil it, and introduce it beyond the stricture, with the blade towards and a little to one side of the frenum, then withdraw it. This accomplished, I introduce a No. 18 sound, already oiled for the purpose. It is held in for a while with a view of arresting the hemorrhage. Should the bleeding not be profuse, I simply insert a piece of cotton and leave it, as I do here. For the operation to avail anything, the full sized sound must be introduced daily for several times, then at gradually lengthened intervals, until healed. Now I can deal with the back stricture, dilating it up to a 16 or 17. Alkaline diluents must be kept up, with an occasional laxative if necessary. This is an interesting, as well as instructive case, and I wish you all to watch its progress with me.

CASE II.—H. C. H., age 37; bachelor; stage-driver. Had gonorrhea twelve or fourteen years ago; has suffered from the consequences of stricture of the urethra nearly ever since. Passes a very small stream, and has several times had retention of urine. Here again, we have stricture, but more classical in its origin than either, in the instance of Case I. For about seventy-five per cent. of all the cases we meet with, result from gonorrhea. First, let us examine the urethra and its condition. Ocular inspection will again suggest that we have too small a meatus. On testing, we find that it admits only a No. 10, and the bulb is barely out of sight, when it is again resisted and will not pass. But, as you see, a 9 goes through and demonstrates an annular stricture, extending three-quarters of an inch back.

The 9 passes unobstructed to the bulbous portion, when it is arrested, and so are all the sizes, down to the smallest. On trying a filiform whalebone bougie, by a little tact, it enters and passes on into the bladder.

We now have a history of the case, and our diagnosis is made—stricture of a large calibre, at and near the meatus, and one of extremely small calibre in the bulbous fossa—what shall we do? After cutting the large strictures, for they rebel against stretching, we might, as in case I, treat the close one by gradual dilatation, for this is possible when we can pass a filiform bougie. But would this be the best course in this instance?

The man is poor and anxious to be at work; is a great sufferer, and has already had several attacks of retention. So my idea is, that since we have it at our command, with the guide through it, we had better use the divulsor and meatome at once.

His urine has been examined. I find no contra-indications to the operation, and he has had 10 grains quinine, with $\frac{1}{4}$ grain morphia. I use Thompson's divulsor as modified in this country. It will readily pass through the forward strictures, so it is best to operate on the close stricture first. Its depth having been measured, while using the bulbs, is marked by the slide. After oiling the instrument well, its tunneled extremity is threaded over the guide, and it passes easily to the stricture. Here force is necessary, but we need have no fear because of, the guide.

But the patient protests so strenuously, because of the pain, we are under the necessity of giving him chloroform. Now you see the instrument passes through and on to the bulge—as measured. The slide is slipped back, and the screw is turned to its full capacity—No. 18. The blood at the meatus is indicative that the rupture is accomplished. Before withdrawing the instrument, as it is let down, I push it towards the bladder, to avoid, if possible, catching the mucous membrane in the angle of its bars. But in spite of me, you see a small flake pinched in the angle where the bars are not rounded.

The divulsion finished, I introduce the meatome and incise the first stricture.

A No. 16 now passes easily into the bladder. There is more

hemorrhage than usual from this incision, consequently I insert a piece of cotton and seal the meatus with collodion.

I wish, again, to impress upon you the necessity of following up these operations by the use of the sound. Otherwise you have a fair example of the result in this patient, as we found him to-day; for he tells me that in one of his fits of retention that his stricture was ruptured by a surgeon, but no instrument was ever introduced afterwards. He will keep quiet for a few days, taking only alkaline-diluents, with an occasional dose of quinine, and a gentle laxative if necessary.



CASES FROM PRACTICE.

PAPILLOMATOUS GROWTHS IN THE VOCAL CORDS OF A CHILD—SUCCESSFUL REMOVAL.

By WM. C. GLASGOW, M. D.

James B., aged 10 years, was brought to my office last November for consultation. His mother states that five years previous she had noticed a huskiness in his voice. This gradually changed into hoarseness, which remained persistent up to the time that I saw him. About two years ago, in addition to the hoarseness, a peculiar, cracked, tremulous tone in his voice was noticed, which was likened to the voice of an old man. There was no apparent interference with respiration, nor any symptom except the change in the voice.

A laryngoscopic examination showed the existence of two papillomatous growths, situated on the vocal cords; the one in the left cord about the size of a marrow-fat pea, covered the anterior third and was attached to the superior and lateral edge

of the cord; the other, somewhat smaller in size, was situated in the right cord, about the middle.



FIG. I.—Laryngoscopic Image of Growths.

The case promised many difficulties to a successful operation. The pharynx was very contracted and irritable, the larynx was very small, as would be expected in a child of ten years. The epiglottis lay very low, as is usually the case in children, and responded imperfectly to the usual methods of raising it.

A momentary view of the growths could only be obtained during a forcible expiratory puff. The size of the pharynx necessitated the use of a small rhinoscopic mirror, which gave a limited view of the larynx.

As the larynx proved very intolerant of the contact with instruments, a course of training was begun and continued some five weeks, before the tolerance requisite for operation could be obtained. For this purpose, the laryngeal sound was daily introduced. The sensibility of the larynx having become sufficiently deadened to permit the passage of the instrument, without producing spasmodic contraction, the operation was commenced. A solution of carbolic acid was used, with the object of producing anesthesia, but owing to the burning, the patient would not allow it to be properly applied.

During numerous sittings, pieces of the growth were removed by means of Schrötter-Türk tube forceps. The superficial portion came away readily when grasped by the serrated blades. The tumor on the right cord was thus removed without difficulty. That on the left cord, however, as is so often the case with the papillomata in adults, consisted of a soft superficial texture, while the deeper parts were tough and resisted the most forcible traction justifiable under the circumstances. A softening having been produced by crushing it with the saw-toothed forceps,—it was removed at later sittings.

I was disinclined to use the cutting forceps, for fear of wounding the contiguous membrane, with the possibility of setting up inflammation and edema. Considering the small space included in the glottis of a child, this would be very undesirable, if not dangerous. An accident of this kind occurred in using the saw-toothed crushing forceps, which produced considerable swelling of the false cord, which necessitated a cessation of all operative measures for over two months. The sittings for operation continued with irregular intervals during the spring and summer; they were dependent essentially upon the mood of the patient, and weeks often elapsed between them. As I did not wish to use any compulsion in forcing the patient to submit to an operation when not in the humor, in fact, it would have been almost impossible to have done anything under the circumstances, I was forced, during many sittings, to be content with a single introduction of the forceps, then, if unsuccessful, to defer further attempts to another sitting.

The production of pain or the occurrence of soreness, would also cause the prolonged disappearance of the patient.

During the later spring months, the prevalence of erysipelas caused a long discontinuance of the operation.

Thus, the case continued through the summer months, when I resolved to try the method of operation recommended by Voltolini, modified however, inasmuch as I used a stubby laryngeal brush, saturated with a tolerably strong solution of an astringent salt of iron, instead of the dry sponge. The patient submitted to this quite readily, as he had become accustomed to this use of the brush. After a succession of such operations, I was much gratified to find that the body of the growth had entirely disappeared. I anticipated a serious task in the eradication of the base. To avoid producing pain, I preferred to try the effect of an astringent, rather than caustics. Although certainly more tedious, I thought, in the end, it would prove the quickest remedy.

After a two months' course of such treatment, all trace of the growth had disappeared and the cord presented a perfectly normal appearance.

The voice is good in tone, a little deeper than is natural.

On December 9th, the patient was shown before the Medico-Chirurgical Society.

The occurrence of laryngeal growths in children is, by no means, rare. P. Bruns has collected from the literature one hundred and twenty-one cases under fifteen years of age. Of these, twenty-three cases were congenital and forty were first noticed under the age of three years. The large majority were multiple papillomata.

In forty-eight cases, no attempt was made at removal. Of this number, thirty-two died, the larger number from suffocation; four recovered by coughing up the growth, and five lived beyond the age of ten years.

In forty cases, the operation for removal of the growth by the intra-laryngeal method was performed. In thirteen of these, complete and permanent relief was given. The youngest case was that of Störk, who successfully removed a growth the size of a cherry stone, from a child two and one-quarter years old, but which recurred in two months.

Schrötter reports a case of a child three and a half years old, in which the larynx was filled by multiple papillomata. These were successfully removed, and two years later there had been no return. The operation of thyrotomy was performed on twenty-one cases, of which eight resulted in permanent cure.

As a palliative measure, tracheotomy was performed in twenty-six cases; of these nineteen were successful.

The operation for the removal of growths in the larynx or children, presents many peculiar difficulties. The active, or at least, the passive co-operation of the patient with the operator, which is so necessary in all laryngeal operations, is often difficult to obtain; in cases in which this is wanting, the difficulties of the operation are proportionately increased, or it may be rendered impossible.

The slight pain, which is so often unavoidable, is the cause of much tedious delay. However brave and willing a child may be in submitting to a laryngoscopic examination, and however unconcerned he may be on the first use of the instruments, the moment pain is produced, there is an end of all willingness and bravery, and it will only be after the pain has been forgotten that anything further can be done.

The use of chloroform has given unfavorable results, although Lewin reports a case of a child of two and a half years, in which it was used with success. That the operation can be

performed, even against the will of the patient, has been proven by several successful cases, under circumstances however, that would lead most surgeons to prefer the operation of thyrotomy.

Voltolini has proposed, lately, a method of operation, which seems to promise many advantages. He discards the use of forceps and other instruments, and depends entirely on the sponge probang; with this he claims to be able to remove, at least, all the softer growths, and as this is generally the rule in children, it would here seem to be specially applicable. His method is to pass a small sponge into the larynx, then, by a series of rapid movements, either to rub the growth off, or to so disintegrate it, that it may be coughed up or removed at future sittings. He reports a case of successful operation on a child four years old, whose larynx was occluded by papillomata. He claims to have removed these entirely in the course of three months, by means of his spong probang, with comparatively little suffering to the patient.



REMOVAL OF A SUBMUCOUS UTERINE FIBROID.

By G. A. MOSES, M. D., *Physician to the Department for Women and Children,
St. Louis Mullanphy Hospital.*

Mrs. R., aged 54 years; married 38 years; has had four children, the last one twenty-one years ago, no miscarriages. Menstruation began very early in life; was always regular and painless, usually lasting four or five days. There has been no indication of menopause, but something more than three years ago, menstruation became gradually more profuse, lasting a week or ten days. Supposing that this was the approach of the climacteric, no attention was given it by the patient. Soon intermediate hemorrhages occurred, at times, very profuse, and for a year past, any prolonged exertion, and finally even the ascent of stairs would occasion hemorrhage. I first saw the lady September 18, 1879, being called during the absence of my father, her regular physician, to treat her for an attack of pluri-

tis. When convalescing from this, she spoke of being "unwell," when the foregoing history was elicited. Advising her of her danger, she declined any interference until the return of my father, upon which, some three weeks later, we visited her, and found that the hemorrhages had been very troublesome, occasioning great prostration. Her stomach was irritable, pulse feeble, somewhat irregular, and running from 100 to more upon slight exertion. Examination revealed an almost spherical, hard, abdominal tumor, reaching to within two finger breadths of the umbilicus. Bi-manual exploration detected the intra-uterine character of the tumor, which could be felt through a slightly patulous os, to encroach upon the cervical canal with an attachment anteriorly, within three-fourth of an inch from the os; a probe passed posteriorly nearly five inches. Examination produced free hemorrhage.

It was determined to endeavor to restrain the hemorrhage, improve the general health and compel the uterus to extrude the tumor.

Absolute rest in the recumbent posture secured almost entire immunity from bleeding. Tonics and well regulated diet were administered, and ergot was used at first hypodermically, (Squibbs' aqueous extract.) This caused a considerable amount of inflammation of the cellular tissue and was abandoned. For several days the drug was used by deglutition, until the appetite and digestion seemed to suffer, but the os was being dilated and the tumor could now be felt approaching the vagina, smooth and slightly elastic. The discharge, at times, offensive. Suppositories of the extract of ergot were now used night and morning, with disinfectant vaginal douches.

Nov. 9th, the growth was within the vagina, and on the 13th, was low enough to produce discomfort, by pressure upon the bladder, and it was decided to operate, which was done on Sunday, the 16th, when the tumor completely filled the vagina, and could be seen by drawing apart the labia. With the assistance of Drs. S. G. Moses, E. H. Gregory, N. B. Carson, L. Ch. Boisliniere and E. C. Gehrung, (Dr. Carson administering ether), I endeavored to pedunculate the growth, by traction with a pair of small forceps, modeled by Dr. Boisliniere, after the fashion of the Hodge obstetrical forceps. These, while not succeeding fully in the object sought, served, by compression

to diminish the circumference of the mass, and, after an hour's effort at traction, the chain of an ecraseur was slipped over them and passed up to the uterine connection. The mass was then slowly amputated. This portion measured, after being a week in alcohol, eight and a half inches by nine and a half in circumference. While I was aware that a part of the growth remained, the uterus being four and a half inches in depth, and easily felt above the pubis, it was considered advisable to desist from further procedure.



FIG. I.—Uterine Fibroid; Condition at Time of Operation.

Alum tampons were packed into the cavity and vagina.

Nausea and vomiting resulting from the ether, which also seemed to aggravate a bronchial catarrh, from which the patient suffered, prevented administration of nourishment or medicine. Quinine and beef extract were given by rectal enemas, with extract ergot, hypodermically.

Nov. 17th.—Had a fair night; stomach still irritable, but takes small quantities of Valentine's meat juice. Pulse, 110; temperature 102.8°.

18th.—Removed tampon; discharge moderate; syringed with potassæ permanganat in liq. sodæ chlorinatæ; pulse and temperature same. Ergot and quinine continued.

19th.—Pulse 112; temperature 102° ; M. and E.; cough troublesome; stomach very irritable; discharge offensive; douche used every three hours; treatment continued; milk punch *ad libitum*.

20th.—During the night, discharge profuse, offensive, containing clots. 8 A. M.: pulse 112; temperature 101.5° ; 4 P. M.: pulse 110; temperature 103.5° . A mass of softening remains of tumor extruded from os, most of which was detached and removed with a pair of Nelaton's forceps; the uterine cavity thoroughly cleansed with the antiseptic douche.

21st.—During night was much depressed; 7 A. M.: pulse 112, feeble; temperature 101.4° ; very restless; discharge very abundant, with considerable hemorrhage. 10 A. M., pulse very feeble and frequent; temperature 98.5° ; hemorrhage continues. After thoroughly cleansing the cavity, find scarcely any trace of the remains of tumor; but a hemorrhage which seems to proceed from the site and also from an abrasion upon the posterior lip of the cervix. The uterine cavity and cervix were carefully swabbed with a solution of perchloride of iron and glycerine, a pledget of cotton, soaked in the same, being packed against the wound. 10 P. M., pulse 120; temperature 99° ; removed cotton; cleansed cavity and replaced a fresh styptic pledget against the abraded cervix.

22d. A. M.—Rested well during night; stomach less irritable; pulse 112; temperature 98.5° ; no more hemorrhage; discharge moderate. P. M., pulse 112; temperature 103° ; pain upon pressure against anterior lip, which seems puffy and tumefied.

23d.—Purulent discharge from rupture of a small abscess on anterior lip of cervix. Temperature now commenced a series of oscillations from 97.5° in the morning to 98.5° or 99° in the evening; uterine discharge steadily diminished; strength improved, and by the morning of the 26th, I found her sitting up in bed, making her toilet. On Saturday, the thirteenth day after the operation, pulse and temperature were normal, and she sat up most of the day. Monday, the 30th, being the fifteenth day, she walked about the room. The depth of the uterus was three inches, and to the touch and probe, the organ seemed healthy. At this date, Dec. 13th, the patient says she is in better health than she has been for years.

I have given the notes of this case somewhat detailed, for the purpose of noticing:

1st. The value of careful and generous use of intra-uterine antiseptic cleansing, the fluid being always of high temperature, the injection being carried well up to the fundus, by means of a flexible tube, as large as can be introduced, and leave a free exit. Not only are septic discharges thoroughly removed, but the stimulus promotes contraction of the muscular and capillary tissues, thus hastening the process of involution.

2d. The value of the styptic salts of iron, when carefully applied, by means of a swab or brush, and when used as a permanent dressing, the combination with glycerine, by which the hard clots are prevented. After the use of iron in this case, there was no more of putrescence, nor hemorrhage.

3d. The size and imbedding of the tumor was such, that it was necessary to remove it in sections, and to have prosecuted the enucleation of the remaining portion which, I think, was a thin section, extending over nearly half of the internal superficies of the uterus, would have exposed a large surface, to which it would have been necessary to apply freely, or by means of more permanent tamping, some strong styptic, by which the liability to septicæmia or inflammatory process would have been greatly increased; there was not, at any time, any appearance of symptoms indicating either complication, excepting the small cervical abscess which, I think, was caused by the impingement of the staff of the ecraseur, at the site of its occurrence.

•

TRANSLATIONS.

LARYNGEAL COMPLICATIONS IN SCLEROSIS CEREBRO-SPINALIS
DISSEMINATA.

(Clinic of Prof Laschkewitsch, Charkoff. By DR. M. LOMIKOWSKY.)

All authors in the description of sclerosis cerebro-spinalis disseminata mention, among other symptoms, disturbance of speech as constant and characteristic. Up to the present time however, no one has made an exhaustive analysis of the vocal affection, nor a laryngoscopic examination of those thus diseased.

Sclerosis cerebro-spinalis disseminata (*sclerosie en plaques cerebro-spinalie*) is a rare disease. It is often mistaken for paralysis agitans, chorea and progressive locomotor ataxia. The more recent clinical observations have demonstrated that sclerosis cerebro-spinalis disseminata is to be recognized by certain pathognomonic symptoms, which vary according to the seat of the lesion and the duration of the disease. The French were the first to call attention to the clinical peculiarities of this disease. They describe three distinct forms: 1, the cerebral; 2, the spinal; 3, the mixed or cerebro-spinal form. This classification is based upon the localization of the pathological processes; the combination of symptoms varies, according to the site of the lesion.

In 1875 we had an opportunity at the Medical Clinic of Prof. Laschkewitsch, to observe a case of mixed cerebro-spinal sclerosis, exhibiting very peculiar symptoms in respect to phonation. A sketch of the general distinctive symptoms is here given.

P—, clergyman; 45 years old; of robust physique, healthy in appearance; complained of severe headache, labored phonation, inability to walk, and violent tremors, particularly in t

upper extremities. While sitting or lying quietly upon the bed the patient manifested no signs of disease whatever. The facial expression was somewhat childish.

The intellectual powers were normal, with the exception of the memory, which was a little diminished. He could explain quite circumstantially the course of development in his disease. Two or three questions sufficed to excite violent shaking of the head, nystagmus, movement of the eyelid and trembling of the upper extremities, which latter increased more and more with attempts, on the part of the patient, to move himself or to execute movements. On attempting to convey a glass of water to the mouth, for example, the trembling of the hand increased to such an extent, that nearly one-half the water was spilt. This trembling of the hand continued even after the glass touched the lips. The same phenomena occurred when the patient tried to pick up a coin from the table; resting his arm upon the table he could more easily grasp the object, otherwise it was very difficult for him to do so.

He could not raise himself in bed without aid. Walking was exceedingly difficult, the left leg would be raised much higher than the right, and then the foot would fall suddenly and abruptly to the floor. The trembling of the head, of the extremities, indeed of the whole body, was greatly increased by every attempt at motion. There was also, quivering of the tongue when outstretched. The sensibility of the right half of the body was considerably less than that of the left.

The organs of special sense, excepting the eye, normal. There was some presbyopia, but general powers of vision otherwise good. Insufficiency of internal rectus; complained of crossed diplopia when not using special efforts in vision; fixation of sight could be effected only after several oscillatory movements (*nystagmus oscillatorius*). Upon each change of position of the fixation point in any direction, the same oscillation occurred, also when it was rapidly removed or brought nearer. The eyes once fixed, the axes remained undisturbed in their proper relation. Speech was labored, interrupted and the intonation very characteristic.

The voice was harsh and vibrating (*vox anserina*). During ordinary conversation, a harsh transition from deep to high tones was noticeable. It was difficult for the patient to maintain an

uniform tone, even for a short time. This undoubtedly arose from the fact that it was impossible to keep the vocal cords at one and the same degree of tension, during any length of time. By the laryngoscope, a constant and irregular vibration of the cords could be observed, during an attempt at utterance of a and e. This was specially evident upon giving the e sound more force.

The patient was familiar with vocal exercises, but would not attempt to strike a note, as he had already learned from experience that he could not succeed.

As is well known, the pitch of the voice depends upon the degree of tension of the vocal cords; that is regulated by the action of the crico-thyroid muscles and, of course, in case of derangement of the functions of these muscles, the tension must be correspondingly impaired.

The irregular vibration of the cords observed in our case, is to be ascribed, in all probability, to the disturbance of muscular cöordination. We thus designate the cause of the disturbance of phonation in this case that it may be the more distinctly distinguished from disturbances due to paretic condition of one cord, occasioned by aneurism of the arch of the aorta, mediastinal tumor, etc., a very different genetic origin.

This condition of the larynx of our patient harmonises completely with the dictum of Prof. Charcot: "Tremors in the cases of *sclerose en plaques*, appear only under the influence of voluntary movements which have a determinate extent (*verbreitung*) and cease immediately upon the cessation of all muscular effort." This anomaly of phonation, as well as the nervous palpitation of the heart which appeared in the early stages of the disease, Prof. Laschkewitsch thought might very possibly indicate a localization of the lesion in the brain (*medulla oblongata*). (*Berlin Clinical Weekly*, No. 41, 1879.)

CAUSES OF DEATH AFTER INJECTION OF MILK AND SUGAR INTO THE VEINS.

As many authorities have praised the intra-venous injections of milk as a substitute for the transfusion of blood, Moutard, Martin and Bichat (*Gaz. Med.*, No. 32, 1879) have undertaken to determine the causes of death in dogs, into whose circulation a

considerable amount of milk had been introduced. The following conclusions were arrived at:

1. The phenomena which ensued upon the injection of large quantities of milk, were symptoms of bulbar irritation (movements of deglutition, vomiting) and diabetes; later phenomena were noticed that indicated irritation of the bulb or pons (disturbances of the respiratory innervation, violent outcries, cessation of heart's action).

2. Even when injected in large amounts (1.3 gr.), the milk had no immediate effect upon the pulmonary circulation, upon the muscular contractility, nor upon the excitability of the nerves and higher nervous centres.

3. The introduction of milk ferment into the veins, appeared to be without effect in dogs and rabbits.

The general conclusion to be made after these investigations is this: that death occurs after large intra-venous injection of milk, as the consequence of bulbar anæmia, which always produces symptoms of irritation. This anæmia may be the result of the blocking of the bulbar capillaries by the milk globules, or of the dilution or alteration of the blood.

The injection of sugar, even in very small amount, gave rise immediately to a very marked diabetes. The diabetes observed to follow injection of milk, may, accordingly, depend upon its saccharine properties.

(*Vienna Med. Wochenschrift*, No. 45, 1879.)

COMPLETE CLOSURE OF THE LARYNX AFTER DIPHTHERIA.

BY PROF. STOERK, VIENNA,

A seven year old boy had become dumb after recovery from an attack of diphtheria. In 1876, three years ago, the child had an attack of diphtheria, in the course of which, tracheotomy was performed. Three weeks after the operation the canula was removed, but on account of the consequent labored respiration it was replaced and worn constantly up to the time of presentation before Professor Stoerk. At the time of the removal of

the canula he could speak aloud. The canula was not fenestrated. Examining the larynx by means of the laryngoscope, a cul de sac could be seen just below the true cords. Movement of the cords was accompanied by no phonation; there was also no appearance of mucus, which generally makes its way up past a canula, even when there is laryngeal stenosis of the highest grade. Diagnosis was consequently made of complete closure of the larynx at the level of the cricoid cartilage. A mirror introduced through the tracheal wound, demonstrated a complete diaphragm between larynx and trachea.

Probably the mucous surfaces, soon after the local inflammation, had grown together, the unfenestrated canula cutting off the passage of air and secretions that would have prevented this unfortunate result.

With a specially contrived knife the adherent tissues were divided, whereupon, after dilation of the constricted space, and closure of the tracheal fistula, the boy was able to speak. A dilating contrivance was affixed to a canula, and kept in the trachea. The patient wore the apparatus several weeks without discomfort, and was allowed to return home under medical supervision.—(*Vienna Med. Wochenschrift*, No. 46.)

CASE OF CANCER OF SACRUM.

BY DR. N. WEISS, *Assistant Physician in the Medical Ward of Dr. Scholz, General Hospital of Vienna.*

Patient male; 32 years of age; admitted August 6th, 1879; of powerful frame and well nourished. For seven weeks he had suffered from excessively severe pain in the sacral region which radiated into both lower extremities, especially the left. Latterly, obstinate constipation and colicky pains in the abdomen. At the time of his entrance into the hospital, no abnormalities of the viscera were discovered. There were no cephalic disturbances whatever. Pupils normal. Facialis and motores oculi unimpaired in function. No disturbance at all of the innerva-

tion of the upper extremities. In the lower part of the body, however, considerable disturbance of the sensory functions was present. Patient complained of constant and spontaneous pains in the hypogastrium, which, occasionally, were greatly increased; pressure upon the anterior abdominal wall excited such exacerbation. He described the pains as colicky and referred them to the lumbar region. These pains extended into the integument and muscles of the inf. extremities, and were especially acute in the parts supplied by the left ischiatic nerve, having here a tearing and piercing character.

The spinal column, upon close inspection, exhibited no abnormal configuration, all its curves being natural. But from the upper dorsals to the coccyx, all the spinous processes were sensitive upon pressure, which sensitiveness was so exaggerated over the sacrum that a very slight pressure over that region made the patient wince violently.

Inguinal lymph glands under Poupart's ligament, not swollen; examination of the deeper seated, not possible on account of the local tenderness. Urinary bladder in normal condition. Urine clear, acid, free from albumen. Temperature 40.6° . Pulse 120.

Anodynes were administered with relief. Clysters and purgatives were required to overcome the constipation. After complete evacuation of the bowels, no change was to be observed in the site and character of the pains above described, hence the presence of fecal accumulations had no connection with their occurrence.

In the following weeks, no essential change in the symptoms took place, the pains and the constipation persisted. Morphia, pot. brom., chloral hyd., all finally had little effect upon the former; the latter was combatted with cold water irrigations. During this time the temperature was constantly above the normal.

Sept. 7th.—A bloody purulent discharge appeared in the left ear without, however, any impairment of the hearing (?).

Sept. 9th.—Vomiting of watery, greenish matters took place; collapse; skin slightly yellowish; occasional stupor, in the intervals of consciousness; continual complaints of the intolerable sacral pains.

In the following days, the collapse sensibly increased, with continuous unconsciousness.

Sept. 12th.—Death.

The diagnosis in the case was, a rapidly growing tumor of the left wing of the os sacrum, partly compressing the nerve trunks emerging from the sacral foramina, and partly exciting inflammatory changes in them.

The symptoms indicated either spondylitis sacralis or a morbid growth connected with the sacrum. The localization of the lesion in the sacrum was obvious. Pressure upon the sacral nerves would cause the spontaneous neuralgic symptoms. The obstinate constipation was readily explained, since the innervation of the rectum is effected through the sacral plexus.

Myelitis and meningitis spinalis were excluded, since with the former there are never such marked and persistent symptoms of sensory irritation, while in case of meningitis there should have been motor disturbance, corresponding to the excessive sensory irritation.

Spondylitis would have required a history of chronic suppuration in the spinal column. Violent and constant pains are characteristic of spinal tumors; also, the rapid collapse of the previously vigorous patient, indicated such a lesion.

Post mortem :—Situated on the anterior surface of the left wing of sacrum, a vascular medullary tumor of the size of an orange which extended anteriorly and between the overlying muscular fibres. It had entered the first three anterior sacral foramina by the side of the sacral nerves, which were surrounded by the morbid growth and apparently compressed. The periosteum was lacking under the tumor, and the bone roughly ulcerated. The neighboring lymph glands enlarged to the size of a walnut, and occupied with cancerous tissue. Genitals normal.

Besides this discovery the only other notable lesion was within the cranium. Secondary medullary growths were found upon the dura mater. The brain was very pale and edematous, the ventricles contained an increased amount of slightly turbid serum.—(*Vienna Med. Wochenschrift*, No. 45, 1879.)

REPORTS ON PROGRESS.

MONTHLY REPORT ON THE PROGRESS OF THERAPEUTICS.

Iodoform in the Treatment of Chancroids.—STURGIS recommends as an application to chancroids, after cauterization with acid, iodoform, finely powdered, either alone or in combination, thus:

R. Iodoformi, 1 part.
Lycopodii, 2 parts.

M. Triturate well. Sig. For local use.

The lycopodium absorbs fluid readily and the iodoform acts as a local stimulant and alterative.

Another good prescription is:

R. Pulv. Iodoformi.
Pulv. Ac. Tannici, āā.

This is more astringent than the other.

The following is useful when the ulcer looks flabby and indolent:

R. Pulv. Iodoformi, ʒj.
Zinci Sulphat. grs. v.
Pulv. Ac. Tannic, ʒj.

M. Triturate. Sig. For local use

The unpleasant odor of iodoform may be overcome, it is said, by adding a few drops of some essential oil, such as rosemary, peppermint and the like.

Of nitrate of silver, he says, "it is not, in the true sense of the term, a caustic," and is of use only "to stimulate indolent, slowly-healing chancroids."—*Hospital Gazette*, Dec. 10, 1879.

Atrophia for Pain of Cancer.—M. ANGER has used with success to relieve the pain of cancer, compresses moistened with a solution of neutral sulphate of atropine, one gram to

1,000 grams of distilled water. The compress is applied to the painful part and then covered over with some impervious material, as a thin sheet of gutta percha to prevent evaporation. The application need be renewed not oftener than three or four times a day, and no signs of absorption of the atropia have been observed. The facility of making the application and the marked relief afforded, commend it to the attention of the profession.

Treatment of Typhoid Fever.—SIR WILLIAM JENNER, whose name is inseparably connected with the subject of typhoid fever, recently delivered an address at Burlingham, on the treatment of that disease. The speaker remarked that he had never seen a case of typhoid fever cut short by any remedial agent. In a very large proportion of cases no other treatment was required from beginning to end than rest in bed, quietude, fresh air, pure water, and regulated diet, although most cases were benefited by a little wine in the third and fourth weeks. If medicinal, in addition to hygienic, treatment were required, it was because special symptoms, by their severity, tended directly or indirectly to give an unfavorable course to the disease. Often grave symptoms passed away spontaneously without special treatment. When drugs were required to check a special symptom, their use should be discontinued when the gravity of the symptom had subsided, for which they were prescribed. Alcohol, on account of its effects on the nervous system, was of greatest value, but only should be given for the purpose of attaining a definite object. As the result of his long experience, Sir William Jenner had come to the conclusion that there were but few cases which required heroic treatment, while in the greater number, the unaided powers of nature sufficed to effect a cure.—*Med. Time and Gazette*, Nov. 15, 1879.

Dialyzed Iron.—PERSONNE, in a communication to the Paris Academy of Medicine, says that the so-called "dialyzed" iron is an oxide of iron, which is distinguished from the ordinary oxides by its almost absolute insolubility in the strongest mineral acids; also by its insolubility in the organic acids and in the gastric juice. When animals, in full digestive activity, are fed with "dialyzed" iron, it is always found in a precipitated state, either mixed with their food or adherent to their stomach

walls, and never in solution. It is also impure, and contains seven per cent. of perchloride, and one per cent. of sulphate of iron. Lastly, it is not really dialyzable, and does not pass through Graham's dialyzer. Therefore, according to Personne, it is neither pure, soluble in the fluids of the digestive tract, nor assimilable; and in the discussion that followed the reading of the paper, Bertholet, the great chemist, confirmed the reader's views. On the other hand, Prof. Hardy pointed out that the action of a drug does not always correspond to its chemical composition, and that the system might be favorably impressed by even small doses when actually absorbed. Another point as showing the indifferent chemical nature of dialysed iron, is the fact that it does not blacken the motions. *Med. Times and Gazette*, Nov. 22, 1879.

Nitrate of Silver in Tonsillitis.—DR. H. C. HOWARD claims that one thorough application of nitrate of silver (solid stick) to the tonsils in the first stage of acute tonsillitis, rarely fails to prevent suppuration, even in patients who have been subject to frequent attacks of suppurative tonsillitis.

Iodoform in Catarrh and Chronic Pharyngitis.—He recommends direct application to the diseased part in cases of nasal and pharyngeal catarrh the following:

Sugar of Milk,	200 parts.
Iodoform,	100 parts.
Thymol,	1 part.

The thymol is said to entirely destroy the disagreeable odor of the iodoform.—*Chicago Med. Gazette*.

Belladonna in Urticaria.—DR. Q. C. SMITH treats urticaria by giving first an emetic dose of ipecac, and, after free emesis, fluid ext. belladonna in small doses, every two hours, until its characteristic flush of the skin is produced on the face, or until vision is considerably disturbed. This impression should be maintained for two or three days, the dose being gradually diminished. Of course such constitutional treatment as may be indicated in each case should be duly instituted, though many cases require nothing further than the belladonna.—*Pacific Med. and Surg. Journal*, Dec., 1879.

Nitrate of Silver in *Ophthalmia*.—W. A. MCNAUGHTON has obtained excellent results in the treatment of scrofulous ophthalmia of children, and in other cases where simpler remedies have failed, from the application of solid nitrate of silver over an inch or so of the previously moistened integument above the affected eye. The slight smarting sensation produced at the time soon passes away. The stain, which results, can readily be removed afterwards with a strong solution of iodide of potassium. It is best to protect the eye with a shade while carrying out this treatment.—*Medical Times and Gazette*, Dec. 6, 1879.

The Use of Chloral as a Topical Application for Bed Sores.—M. MARTINEAU has found that the sloughing of the integuments over bony parts can be treated, if not prevented, by the use of a solution of chloral hydrate, one part in one hundred parts of distilled water. He lays this on with a feather and lint, and in a few days the wound heals.—*Med. Press and Circular*.

A Tenacious Collodion Film.—A collodion film of considerable strength may be prepared by making a concentrated solution of gun-cotton in equal volumes of ether and absolute alcohol, and adding to it a small quantity of balsam of copaiba. This collodion, when largely diluted with ether and alcohol, may be used for rendering linen and cotton fabrics water-proof.—*Boston Journal of Chemistry*.

Digitalis an Anaphrodisiac.—When digitalis or digitaline is administered for some time to a man in full possession of sexual powers, these become gradually weakened, the propensities disappear, formation of the liquor seminis diminishes, and may at last cease altogether.

The anaphrodisiac properties of the drug are the secret of its good effect in spermatorrhea.—*Gaz. Med. de Paris*.

EDITORIAL.

VOL. III.

JANUARY, 1880.

No. 1.

PHLYCTENULAR INFLAMMATION OF THE VOCAL
CORDS

It is well known that in the course of the acute exanthemata, measles, scarlatina, erysipelas and variola, the mucous membrane of the larynx may be secondarily involved, exhibiting inflammatory conditions varying in degree of intensity from a simple hyperæmia to the development of croupous exudation. In variola, pustules sometimes appear, both in the larynx and in the trachea and bronchi. An acute herpetic affection of the larynx up to this time is not described in the books. The eruption has, indeed, been observed upon the tonsils, upon the palate, isthmus, cheeks, in a case reported before the St. Louis Medico-Chirurgical Society—(COURIER OF MEDICINE, August, 1879) upon the left side of the tongue and roof of the mouth, accompanying the development of paralysis of the left facialis, but the larynx in all these cases seems to have been exempt, even the pharynx not being involved. Dr. Rudolf Meyer, of Zurich, reports a case of undoubted herpetic affection of the larynx, in the *Berlin Clinical Weekly*, No. 41, 1879. A girl of 18 presented herself on the 3d of June, with the history that ten days before she had noticed a slight hoarseness, which in three days increased to complete aphonia. At the same time she had a slight cough, but no pain in the region of the larynx. These symptoms were accompanied by moderate fever.

The condition at the time of presentation was as follows: Pulse 92; temperature apparently normal; tongue slightly

coated; appetite small; voice absolutely without resonance: slight tendency to cough; both vocal cords a little reddened and swollen, and not completely approximated in attempts at phonation; on the free margin of the left cord, near the anterior commissure, a minute whitish circular erosion, and on the corresponding part of the right cord, though somewhat away from the free margin, a similar clouding of the epithelium.

June 6th.—A moderate phlyctenular conjunctivitis of right eye and limited herpes of right ala of nose, together with an eruption upon the upper border of the left side of the upper lip.

June 9th.—The white spot upon the left cord no longer visible, that on the right scarcely to be seen. The diffuse redness diminished to a yellowish discoloration with longitudinal vascularization. The cords again linear and better approximated; the voice again distinct, though still weak. The eruption upon the eye and face also markedly diminished.

June 10th.—Patient dismissed. Insufflation of calomel was the only treatment of the laryngeal affection.

As the mother of the girl was suffering at the same time from a syphilitic laryngitis, a suspicion that her disease was of similar origin was only natural, but the very limited and superficial character of the epithelial lesion opposed such a diagnosis, while the obvious facial herpetic eruption that speedily ensued, declared its true nature.

This case is not only of general interest, as adding another to the list of distinct laryngeal affections, but in practice it warns against premature heroic treatment of laryngitis.

The “abortive” treatment of *arg. nit.* solutions, applied by brush or atomizer, if any are rash enough to give such, or, indeed the local use of any irritating drugs, would be disastrous in herpetic laryngitis. In consideration of the vital function of the larynx, it being the gateway of respiration, as well as the organ of voice, it ought to be insisted upon, as a fundamental rule of practice, that none but the mildest applications should be made to its interior without first making the most thorough laryngoscopic examination possible; even then, in doubtful cases, it is vastly better to err on the side of moderation.

Dr. Meyer states also, that during a previous epidemic of herpes in Zurich, expressing itself in numerous cases of herpes labialis, herpes corneæ, etc., in one or two instances he observed small ulcerations upon the pharyngeal mucous membrane, and upon that covering the arytenoid cartilages, each having an inflammatory halo, and being probably due to pre-existent vesicles. This condition was accompanied by a slight pain in the throat and some difficulty in swallowing.



CANCER OF THE BREAST FOLLOWING LONG CONTINUED ECZEMA OF THE NIPPLE.

This interesting question was recently discussed at a meeting of the Clinical Society of London, and a number of cases were reported. Mr. Lawson remarked that one of the surgical questions of the day was, whether we might consider intractable eczema of the nipple as a precursor of scirrhus of the breast. The cases related by Paget and Butlin had established the fact that scirrhus of the breast frequently followed a condition of the skin which greatly resembled eczema in its general character. Mr. Lawson was in doubt as to whether this so-called eczema was a true eczema; whether it was not rather a new growth, having merely the superficial character of that disease, but differing from it in its microscopical structure.

Dr. Thin, one of the best known microscopists and dermatologists in London, regarded the disease as something different from an eczema, and thought the cancer in such cases preceded the alleged eczema. Sir James Paget agreed that it might be unwise to give the name eczema to the condition of the parts; but he differed from Dr. Thin on clinical grounds. He thought there were stages in which the disease was not cancer, and was curable. Such cases, however, are in danger of becoming can-

cerous; and similarly, in continued ichthyosis of the tongue, the tendency was to a cancerous degeneration of that member although it would be wrong to so diagnosticate it at the outset. Mr. Hutchinson considered the term eczema as correctly employed by Paget and Butlin, seeing that it admitted of a wide application, and that the nature of the affection so-called, varied much. He made the point that in some cases, the disease was simply a local trouble of the nipple which, disturbing the local nutrition, and continuing to the cancerous period of life, might eventuate in that fatal process; with these might be other cases in which a condition, more nearly allied to cancerous degeneration set in from the first.

The practical question raised in the debate was, whether, in a case of long-continued eczema of the nipple, which had stubbornly resisted all methods of treatment, we were not justified in advising the removal of the breast in anticipation of more serious consequences.

If it were incontrovertibly established that all intractable eczemas of these parts were invariably followed by scirrhus, there could be no doubt as to the propriety of surgical interference, but we do not believe that experience favors this assumption, and with our present light, it would be highly culpable to undertake so serious an operation without further statistical information. The truth probably lies somewhere behind Hutchinson's shrewd suggestion, that some cases are really eczemas which, act as constant local irritants, and we think in these predisposed to the diathesis, are apt, later in life, to provoke cancerous changes; while in other instances, the initial process is in itself a form of malignant new growth. Further investigation should be in the direction of differential diagnosis, microscopically and clinically considered.

PROFESSOR LISTER ON THE ANTISEPTIC TREATMENT.

At a recent meeting of the Metropolitan Counties (South London District) branch of the British Medical Association, Prof. Lister took occasion to reply to recent criticisms on his method (antiseptic) passed by Mr. Savory, at the meeting at Cork. His remarks, published in the *London Lancet* for Dec. 6th, 1879, are quite lengthy, and we, out of consideration for space, notice only those that are of general interest to the profession.

He did not think he was fairly open to the charge that he had failed to produce statistics of his work and its results, and attention was called to the statement concerning hospital diseases, published when he left Glasgow, and to his address before the British Medical Association in 1875.

Mr. Savory's table, compiled from the books of St. Bartholomew's Hospital, embraces 2,862 cases of injury, and 1,235 major operations. The deaths from injury have been 7.47 per cent.; the deaths after operation 5.82 per cent., the deaths from blood-poisoning, including pyæmia, septicæmia and erysipelas, have been, after injury, 0.42 per cent., and after operation, 1.44 per cent. Lister claims that this large mass of cases embraces the results of the practice of four different surgeons, all of whom practice, to a greater or less extent, antiseptic surgery. Mr. Savory used the catgut ligature which certainly renders death from hemorrhage and from blood-poisoning less likely. He also used other antiseptic precautions. The late Mr. Callender, it is claimed, also practiced very careful antiseptic treatment. He did not, however, make use of the spray. Mr. Smith, whose practice is also included in Savory's tables, used almost the same precautions, in many cases, as Lister does himself.

Referring to his own statistics, from 1871 to 1877, he had only 72 cases of injury during these years, and they were all somewhat severe injuries. 33 were compound fractures, and seven were wounds of joints, conservatively treated. There were four deaths, which gave 5.7 per cent. against the 7.47 per cent. of St. Bartholomew's. None of these 72 cases died from blood-poisoning. All his operations, recorded in his case-book were 845; of these 37 died, or 4.4 per cent. Mr. Savory's table included only major operations. Of Lister's 845 operations, 725 were major; and of these he had 37 deaths, which gave him 5.1 per cent. against the 5.82 per cent. in Mr. Savory's tables.

Coming to the question of blood-poisoning, Lister had 6 in his 725 operations, or 0.82 per cent., while Mr. Savory's table showed a percentage of 1.44 from the same cause—nearly double. Dividing his operations into septic and antiseptic, Lister had two deaths from blood-poisoning in 553 antiseptic operations, or 0.36 per cent., and four deaths from the same cause in 292 septic operations, or 1.37 per cent.; a difference in favor of the antiseptic, of very nearly one per cent.

Though the spray was introduced in 1871, he claims that he was working under difficulties, but since 1875, the antiseptic treatment has been carried out more effectually, and the results have been more satisfactory. While the percentage of deaths, after all operations, was 4.7, previous to 1875, since that time it has only been 3.8 per cent. Of 295 operations and wounds, to which must be added a certain number of accidental wounds, he had, in these last years, only one death from blood-poisoning—a case of pyæmia, where he had performed a plastic operation on the nose.

During these last years, since 1875, he has had 80 major amputations, and of these there were nine deaths, or 11.25 per cent. He goes into detail concerning these cases, and claims that no patient died of a preventable cause—all who had a chance of recovery got well.

Of that class of cases that used to be considered extremely dangerous with regard to the risk of pyæmia—cases

of ununited fracture, treated by cutting down on the seat of fracture and removing the ends of the fragments—he has had, in the five and three-quarter years, 26 operations and not one death.

Mr. Bryant had alluded, disparagingly, to the table published by Watson Cheyne, saying that some of the cases were so trivial as to be of no importance. Lister replies that cases of injury are confessedly uncertain, but claims that to have a series of twenty cases of healthy joints opened, and kept open, without a single failure as regards the septic element, is a matter of great importance, and he thinks it indicates that we have here evidence that there is a new principle at work.



DR. J. P. KINGSLEY has kindly placed at our disposal the following from a private letter of Dec. 6th, from Dr. W. B. Burton, who has been attending the conference on Animal Vaccination at the London Med. Soc. Building:

“The subject of animal vaccination has recently been exciting no little interest, and its advocates have been manifesting no little energy in urging the advantages which they claim for it.

Dr. Cameron intends to introduce into Parliament a bill, which if it becomes a law, will compel the authorities who superintend vaccination to provide lymph obtained from calves only.

Dr. Warlomont, of Brussels, who, for years has been a strong advocate for animal vaccination, read a learned and somewhat lengthy essay on this subject, but it was generally conceded that he did not furnish the opponents of arm to arm vaccination the support they had anticipated.

Dr. Warlomont stated that the vaccine lymph, whether obtained from the calf or the human subject, is *identical*; that there is no evidence of deterioration of protective power of the vesicle produced.

He claims that all statistics are worthless, in consequence of circumstances and conditions being so dissimilar; that statistics to be of any value must be furnished by men of superior intelligence and who are close observers, and from cases that are parallel. The age, quality and conditions of lymph must also be taken into consideration.

He states, in conclusion, that arm to arm vaccination will long continue to be the greatest preventive of small pox, and nothing ought to be omitted to encourage and regulate it, until the time arrives when it will be supplanted by its faithful auxiliary, animal vaccination.

In point of fact his claim for animal vaccination is little more than a desire to overcome the prejudices on the part of many against vaccination, and at the same time to afford absolute immunity from syphilitic inoculation.

Yours truly,

W. B. BURTON."

COMMUNICATIONS.

Mr. Editor :—The *London Lancet*, Dec. 6, 1879, contains an article entitled, "Accumulation of Cerumen Simulating Chronic Bronchitis," which presents several points of sufficient interest to justify its partial reprint.

The patient had suffered at several different times from acute and subacute bronchitis, from which she had recovered. Subsequently a violent "morning cough" appeared which resisted all treatment as a bronchial affection. So violent was this cough—often lasting nearly an hour—that she dreaded rising, having generally to rest several times during dressing on account of exhaustion.

For two years she had complained of an increasing deafness, one ear having become almost useless. Later, the good ear became affected also. *Both ears were filled with impacted cerumen.* After much syringing and soaking with oil, the cerumen was removed. The immediate result was complete restoration of hearing and the disappearance of her most distressing cough and sickness. She appeared like "quite another woman."

Such is the rather extraordinary history given. Aural surgeons are familiar with the fact that obstinate cough may be excited by irritation of the external auditory canal; the simple introduction of a probe may excite such a cough in some. It is, consequently, not a little extraordinary that a contributor to the *Lancet* should not have at least suspected a connection between the pronounced aural affection and the very troublesome and refractory cough. He states that no examination of the ears was made until the deafness threatened to become complete.

His treatment is also remarkable, inasmuch as he relied upon the softening effect of oil to assist in the removal of the hardened masses. By this time it should be well known throughout the profession, that a warm alkaline solution, carefully injected into the ear with a syringe, is the best method for removal of accumulations of ear wax. From oil nothing of consequence is to be expected. Water, well tinctured with sod. bicarb. is a convenient and efficient application.

The great and total relief afforded by the removal of the wax, is well worth bearing in mind. CHAS. A. TODD, M. D.

Surgeon Diseases of the Ear and Throat, St. John's Hospital.

BOOK REVIEWS AND NOTICES.

A SYSTEM OF MIDWIFERY, INCLUDING THE DISEASES OF PREGNANCY, AND THE PUERPERAL STATE. BY WILLIAM LEISHMAN, M. D., Regius Professor of Midwifery in the University of Glasgow, etc. Third American edition, revised by the author, with additions by JOHN S. PARRY, M. D., with about two hundred illustrations. *Henry C. Lea, Philadelphia.*

We have before us a work which, in the sixth year of its existence, has reached the third edition. The chief alterations in the second, were in the physiological section and in the chapters on puerperal fever, the latter of which were rewritten to give greater prominence to the doctrine of septicæmic infection.

Dr. Leishman is too well known to the profession, not only that, but even to the student who is about to enter the profession, to need any introduction. Of his work, we need but say it is a standard, sound and practical. Leishman, with a Scotch fondness for a foundation on facts, has given us a work which may, with confidence, be consulted in any emergency.

In comparing this with previous editions, we have noted very many changes, here an omission, there an addition.

He treats more fully in this than in previous editions, of the physiology of conception, the contact of the spermatozoon with the ovum, and the changes in the yolk, though he omits some points that are considered well established by many of the ablest physiologists.

In speaking of the alteration in the form of the uterus and its situation, as well as anatomical relations, during pregnancy, he omits giving the influence exercised by the position of the rectum. Under the signs of pregnancy he puts much less reliance than formerly in the appearance of kyestine in the urine. Under the diagnosis of pregnancy, he guards his expression, as to the certainty of the sign of ballottement, with the reservation that it is certain only in experienced hands, and it is of

special value when the child is dead and more certain signs are absent. We hope that the practitioner who fails to succeed and condemns his own want of experience on this assertion, will not become discouraged, as we know that such men as Cazeaux and Depaul mistook uterine displacement for pregnancy, because there was given to the finger exactly "the sensation of a fetus."

Among the symptoms of extra-uterine pregnancy, he adds, that along with the uterine hemorrhage, there is a discharge of a membrane which is a true decidua, and this is of great importance in diagnostic value. In the operation by vaginal incision for the relief of extra-uterine pregnancy, the almost universal death of the mother, is not mentioned.

He attributes, in many cases, the cause of so-called pneumonia in puerperal women, to hemorrhagic infarctions brought about by the transmission of a clot from the veins of the right side of the heart, to the pulmonary artery. He mentions the relation which subsists between pregnancy and disease of the heart; but does not lay enough stress upon this point, for valvular disease of the heart is not impressed as it should be upon the professional mind, as one of the most serious complications of pregnancy. Under the head of Labor and its Phenomena, he merely mentions in a foot note, the contractions of the womb in the early months of pregnancy, and states that they are painless, can be recognized with ease, and constitute special evidence that the tumor is uterine. But he does not lay this down with the prominence that the subject deserves.

In the treatment of a rigid os, he said before, that tartar emetic, in nauseating doses, was better than bleeding; but he now places them in the same category—not to be used. In the third stage of labor, he omits to mention the manner of the escape of the placenta—edgewise, folded and non-inverted, as usually asserted. In the mechanism of labor, he still contends against Naegele, and with each edition he becomes more earnest in his rejection of bi-parietal obliquity.

The "positions" of American obstetricians, are given in Parry's note, yet he (the author), when he describes each special position, omits to state to which number in the American classification it belongs.

In the treatment for the prevention of abortion, he omits

entirely the recommendation of blood letting, and does not mention the use of *viburnum prunifolium*.

In the treatment of placenta prævia, when the frequency and amount of the hemorrhage is great, he recommends bringing on premature labor as best, in the interest of both mother and child.

In the treatment of post partum hemorrhage, he recommends turpentine in half ounce doses, and he reports the effect most satisfactory. He adds to the consideration of hemorrhage after delivery, what McClintock calls secondary hemorrhage, which commences after a patient has been delivered six hours, and within a month of the event.

In speaking of the operation of gastrotomy, better named gastro-hysterotomy, he corrects his mistake as committed in his second edition, where he confounded laparotomy with gastrotomy. When pelvic distortion is great, he recommends the new operation of gastro-elytrotomy by which the danger of opening the peritoneum is avoided. Throughout the whole of the third edition, where he recommended the use of chloroform before, he changes to anæsthetics, and in the end of the work, he expresses a decided preference for ether.

In the use of the forceps, he still advocates the lateral position for application, which is far more objectionable than the recumbent. He omits the direction, that if pain be absent, our efforts at extraction should be intermittent, so as to imitate as closely as possible the normal process. He cautions the operator not to carry too far the swaying or double lever action, both on account of the loss of power and increase of danger.

In podalic version, he directs that the foot or knee which is lowest in the womb should at once be seized, but in a transverse presentation, there is no doubt but that turning will be more easily effected, when we seize the leg of the side opposite to the presenting shoulder. To the bi-manual or bi-polar method, he adds Dr. Maxson's postural method — application of genu-pectoral position.

The author has made in each edition numerous changes in regard to puerperal fever. In his first edition, his view was that puerperal fever was a disease belonging to the so-called zymotic class.

At the obstetrical society in London, in 1875, he stated that

he had found reason to renounce the above view. In the second edition he announces, and the view he still holds is, that the majority of cases are of septic origin, and that other cases are due to the poison of acute specific diseases, typhus, typhoid, etc. He tabulates his views as follows:

Puerperal septicæmia or pyæmia.

1 Auto-genetic.

2 Hetero-genetic.

Puerperal erysipelas.

Puerperal form of scarlatina or other specific infectious fevers.

He gives but a doubtful assent to the "bacteria" theory. Under treatment, I am surprised he does not mention the employment of cold water, or the Kibbie bed, which Dr. T. G. Thomas has found so serviceable in the after treatment in ovariectomy. We regret that our author is still so unsettled in his views of puerperal fever. By that term, he covers nearly all post-partum diseases. We had hoped that, in revising, he would place before us the symptoms and treatment more concisely, and with greater vividness of description. In this edition we miss many of the valuable additions which the lamented Dr. Parry had added to the original text. At least eighteen have been erased, and we fail to find that they are superfluous in the modified text. Dr. Parry's views of extra-uterine pregnancy, and of diphtheria of puerperal wounds, both subjects to which he had devoted much study, are too valuable thus to be lost. While we have no hyper-sensitive feeling in regard to foreign books, for science should know no national lines, yet we acknowledge a strong antipathy to the wholesale system of republication of English medical works, which prevails in this country, without even an American editor, who, of course, would be better informed of our writers of to-day.

P. V. S.

BOOKS AND PAMPHLETS RECEIVED.

THEORY AND PRACTICE OF MEDICINE: By John S. Bristowe, M. D. Second American edition, revised by the author, with notes and additions by Jas. H. Hutchinson, M. D. *Philadelphia: Henry C. Lea.* (Hugh R. Hildreth Printing Co.)

SCIENCE AND PRACTICE OF MIDWIFERY: By W. S. Playfair, M. D., F. R. C. P. Third American edition, revised and corrected by the author, with notes and additions by Robt. P. Harris, M. D. *Philadelphia: Henry C. Lea.* (Book and News Co.)

LECTURES ON DISEASES of the Nervous System, delivered at La Salpêtrière, by J. M. Charcot. Translated from the second edition by George Sigerson, M. D. *Philadelphia: Henry C. Lea.*

BIOGRAPHICAL DICTIONARY OF CONTEMPORARY AMERICAN PHYSICIANS AND SURGEONS, Edited by William B. Atkinson, M. D. Second edition, enlarged and revised. *Philadelphia: D. G. Brinton, 1880.*

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF MISSOURI at its Twenty-second Annual Session, held in Columbia, Mo., May 20 and 21, 1879.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL
SOCIETY.

Stated meeting, Oct. 16th, 1879. Dr. S. G. Moses, President, in the Chair.

ALBUMINURIC CONVULSIONS.

Dr. Prewitt.—I was called the evening before last to see a lady in the seventh month of pregnancy, whom I found with swollen feet, pale face, and suffering from the most intense headache, with a pulse that was rather hard, and had considerable tension, and with some nausea. I apprehended convulsions because I was satisfied from the general symptoms that there was albuminuria, and I prescribed for her. Her husband was not at home at the time. I left with the request, if she was not better within two or three hours, to let me know. That was about 7 o'clock in the evening. Between 10 and 11 p. m., a messenger came, saying she had a convulsion. When I got to the house, I found her in a state of semi-consciousness, not being able to recognize me. I prescribed active cathartics, etc. She passed through the night without another convulsion. On examining the urine yesterday morning, I found it perfectly solid on heating it, so that when the test tube was turned upside down, not a drop was lost, and I had difficulty in washing it out by means of a stream of water, so solid was it with the albumen. The amount of urine which she lost seems to be not very short of the usual quantity. I learned from her that she had been having swelling about her feet for the last two weeks, but during the preceding two days, it had greatly increased as had the paleness about the face. I saw her this morning and again this evening; there was then less puffiness, less swelling, and the headache had subsided. She spoke a little and looks better, but it is only the seventh month of pregnancy, and she will have

to run the gauntlet for the next two months in that condition of things. Now, the question with me is, whether she is likely to do it in safety, or whether the probability is not that I will have to produce premature labor in order to save her life. With a convulsion already, with the urine loaded with albumen, and the other symptoms, I never saw a case that I felt more anxiety about.

Dr. Coles.—Did you test the urine before she had the convulsion?

Dr. Prewitt.—No, sir, I had no opportunity of doing so. I think I examined her urine some short while before she became pregnant. She was then suffering from irritability of the bladder, and I prescribed for her without finding albumen at the time. There was little, if any, cystitis.

Dr. Boisliniere.—In a case like this, I would not interrupt the labor but would bleed the woman, following the teaching of the immortal Dewees and Meigs. You may talk as much as you please, but you will have to use the lancet. When a woman has this intense headache, dimness of vision, etc., these changes are significant; and, with the pulse tense, the urine scanty, etc., I would not hesitate to bleed. I would not produce premature labor, because the attempt might cause convulsions. I think it is a pretty well established rule that, unless the indication is very great, it is not well to interfere in those cases, unless the cervix be dilated. Wait until this takes place and then aid labor. I think the safest thing *Dr. Prewitt* can do in this case, is to follow in the old beaten track, and give this woman a good bleeding from the arm, followed by saline purgatives, getting in this way a good deal of water from her blood and so relieving the tension on the brain, and I think he will have a good success. You may talk, as it is the fashion now among some, about the nervous origin of eclampsia, but here is a case that goes to disprove this theory, because, as far as I can see, there is no such cause of irritation in this case. Eclampsia has been compared to the irritation in teething in children, but nothing of that kind exists in this case. She is albuminuric, but albuminuria exists in ninety per cent. of cases of convulsions. Two or three days ago I was called in to see a woman—a primipara, who presented the same history, and who, after having had several of these convulsions, had been bled.

Dr. Papin had bled the woman twenty ounces, and I bled her twenty ounces more, and that put an end to the convulsions. If a woman, having these convulsions, has been bled, and the convulsions still continue, it is because she has not been bled enough. And what is the difference if a woman lose twenty or thirty ounces, or forty or sixty ounces of blood, who loses forty ounces of blood every month of her life?

Dr. Bauduy.—In reply to Dr. Boisliniere's allusion to the neuropathic theory, I will simply say, that in my paper, I made no reference to the treatment at all, or at least only touched upon it.

Dr. Boisliniere.—Because you were afraid to.

Dr. Bauduy.—Not at all; but the subject was too extensive. I spoke, however, of cases in which venesection would be a very proper remedy

Dr. S. G. Moses.—I recollect some years ago a lady who was on a visit to my family, was suddenly seized with convulsions. I bled her very freely. I do not know how much blood I took, but enough to relieve her headache, and she never had another convulsion, went to full term and was delivered of her child. In cases of that kind there is more or less congestion of the kidney, producing albuminuria. I coincide with the doctor, as regards the practice, as far as my experience goes.

Dr. Maury, (of Memphis.)—I should heartily indorse the practice of bleeding.

Dr. S. G. Moses.—I was on a race course once, and a man there who was suffering a great deal from headache, asked me to bleed him. I took about forty ounces of blood from him and he was immediately relieved; and in half an hour afterwards he came down and ate a hearty race dinner and drank champagne *ad libitum*, without any return of the headache. During his life he was bled about once every four or five months. The man was the Prince Murat, who died a short time since in Paris, aged 80. Dewees laid it down as an absolute necessity, that if a patient complained during labor of headache to bleed immediately. I do not know how it is that we are now so afraid to relieve our patients by venesection. I have never yet seen any bad effects from it. The sister-in-law of this gentleman whom I just mentioned, was bled on an average once a month, for twenty-five years of her life, and is still living, now about 70 years old.

So that it would seem that bleeding will not kill, although there certainly are cases of disease in which it is inadvisable.

Dr. Prewitt.—I was going to say that I looked up my lancet, and if there had been any further convulsion I should have used it, but she had no indications of further convulsion, and I thought I would wait. I do not think Dr. Boisliniere caught my idea exactly with regard to the production of premature labor. But I will say that as regards the bleeding, I fully concur in the view that it is important in these cases to bleed, and I propose to do it in this case if there are any further threatenings of convulsions. But the point I made was this: She is to go two months yet, with the kidneys and the general system in this condition, and can you hope by bleeding her and by the use of purgatives, etc., to so remove the condition as to get her safely through the next two months? The kidneys are undoubtedly congested. I examined the urine microscopically, and found one or two casts, but I take it that in almost all cases in which we have albumen in the urine, there is a certain amount of congestion; in fact, they are almost always in proportion.

Dr. Barrett.—I do not see how it is possible for any one to determine whether it may be necessary to produce premature labor in this case or not. In New York city, all these kidney troubles are much more prevalent than here; you can go into a hospital there and pick out the patients suffering from these complaints, by means of their waxy faces, across the ward. In all the Eastern hospitals, it is the practice to put off these convulsions by the administration of cathartics, and the hot air bath. This is done by putting the patient in bed, and introducing hot air under the bed-clothes; a very copious perspiration can be produced in that way, and I have seen some of the most threatening cases go through without any difficulty, and even without convulsions. Jaborandi has also been lauded of late for that purpose, but I believe jaborandi is an oxytocic. I think, in Dr. Prewitt's case, I would give this woman, daily, perhaps, some active saline cathartic. If it were necessary, I would also give her a hot air bath daily, and await developments. If the case became so urgent as to make other treatment necessary, or very advantageous, I should resort to the induction of labor.

Dr. G. A. Moses.—In the commencement of the evening, Dr.

Maughs remarked that he thought the subject was exhausted. I do not think it has been more than touched upon. Certainly, the two papers (my own and Dr. Bauduy's), did not touch the treatment at all; I purposely avoided it. I think each of these cases presents its individual aspects. It is almost impossible to have a set rule of practice, especially in such a case as Dr. Prewitt's, in the seventh month of pregnancy, when it is desirable to carry both mother and child through to a safe delivery. Perhaps bleeding would be of great service, but it is incorrect to say that, *because* there is albuminuria and congestion of the kidneys, there should be venesection. I do not see why, in any pregnant woman with congestion of the kidneys, there is any more reason for bleeding than in a case of Bright's disease without pregnancy. Dr. Prewitt's case does not present symptoms of acute nephritis even, and he says he found but one or two casts. There may have been a temporary local congestion in one or both of the kidneys. The amount of urine excreted seems to have been sufficient. He does not know the constituents of the urine other than albumen. It is well known, beyond all question of doubt, that albumen presents itself in the urine under a very large variety of pathological conditions; and, if any albumen exists, it is as a result, not as a cause of renal congestion. If there is acute renal congestion, there will be blood in the urine. But that is ^{not} a basis of treatment, and we never can arrive, except empirically, at any proper basis of treatment in these cases, until we have arrived at a more thorough knowledge of the pathological and etiological conditions, and these are points that both Dr. Bauduy and myself attempted to treat of in our papers. The grounds that we both took were similar, not entirely denying the fact that parenchymatous nephritis was a common condition, but denying that, as a general rule, it was *the cause* of convulsive seizures. As to the subject being exhausted, I think we are but at the threshold; the very first men are studying it now with the utmost intensity, and I do not think a satisfactory conclusion has yet been reached. The probability is that these convulsions are due to a variety of causes. I am satisfied that Bright's disease never, or very rarely causes convulsions, except in the latter stages of the disease, or in acute forms in which not only the kidneys are congested, but the inflammation has extended to such a degree of

functional destruction that there is a central neuropathic condition set up; and blood letting will not relieve that form of inflammation, and it never has been claimed that it would, and that condition does not constantly exist in puerperal eclampsia. I want to hear very much the expression of opinion from the older members of the society, on the real subject broached; that is the pathology, not the treatment, which is now empirical to a great extent.

Dr. Maughs.—I did not mean to say that the society had left no further researches possible in this case. I remember though that it was discussed, and that I commended Dr. Moses' paper, giving the Traube-Rosenstein theory upon the subject. Rosenstein held that this is anemia, but anemia dependent upon hyperemia. Dr. Bauduy, in his paper, gave an exposition of the neuropathological theories of this question. He advocated the view that a large element of it is neurotic. I differ with Dr. Moses that a large number of cases are nephritis. I think it is a very different thing. In this case, it is entirely different; it is simply a renal congestion, produced as is thought by most authorities, by pressure of the uterus, and a corroboration of this view is that it occurs most frequently in primiparæ, where there is great pressure from the uterus, keeping up a state of congestion, and interrupting the return of the circulation, thus producing albuminuria. We bleed in these cases, not so much to relieve the condition of the kidneys directly, as to deplete the blood. In the Traube-Rosenstein theory, blood-letting finds its advocacy, and in every other theory. If it be true that it relieves the local hyperemia, and relieves the tension upon the brain, relieves the anemia and removes the poisonous matter from the blood that produces the congestion; blood-letting finds an advocacy even in the very nature of the pathology given by the neuro-pathologists. Now there is, perhaps, no subject under discussion in the world at the present day, that has received the universal sanction of any one remedy, that puerperal convulsions have. All over the civilized world, the lancet is advocated.

Twenty years ago, when we had to bleed a patient, we bled a certain amount, and if that did not relieve, we bled again. But now, owing to the blessing of chloroform, we are not driven to

that necessity. We bleed them freely, while under the influence of chloroform, and move their bowels, and after they are moved, treat them with morphine; controlling the convulsions by breaking their force, depurating the blood, and relieving the hyperemia by the lancet. As it is not advisable to keep them unduly under the influence of chloroform, we give them hypodermic injections of morphine. I defy any man to bring forward any mode of treatment which has the same unanimity of approval throughout the world as this has. But it may not be necessary to bleed always. I simply would treat them with saline cathartics, jaborandi, etc., unless the convulsions were imminent.

Jaborandi has the effect of sweating the patient profusely. If the symptoms were serious, I would give the same advice, as I gave to Dr. Boisliniere some time ago in the case of a primipara in the eighth month, to bring on premature labor, since in all probability, if he waited, she would have another and another convulsion, and he had better bring on an immediate delivery, so that the congestion of the kidneys would subside. A remarkable and wonderful proof of the pathology as far as the albuminuria is concerned, is given in the fact of the rapid recovery of those patients after confinement.

We all know that patients in the last extremity, after these convulsions, do recover rapidly after confinement. Convulsions do not produce albuminuria, and albuminuria does not necessarily produce convulsions, but they run very closely together, and a woman, who has had that condition of the blood is almost certain to have albumen in the urine. I thought Dr. Bauduy's paper was a most able exposition of the subject as it stands at the present time.

Dr. Bauduy.—I merely wish to say as regards what Dr. Barrett said in reference to the oxytocic effect of jaborandi, that I think it is very probable, from the fact, that it is diverted in its action to the genito-urinary system to a great extent; and I am satisfied from experience, and I see it stated by Dr. Bartholow in his book, that it is the most powerful aphrodisiac remedy known at the present day. Therefore, it is not improbable that it may exert some oxytocic effect, because what would have an effect upon the erotic powers might also have some oxytocic effect.

I think the subject of my paper has not been touched upon in this particular respect. I carefully avoided any allusion to the treatment, because I did not think it had anything to do with the pathology of the matter. According to my ideas on the subject there are two forms, the hyperemic and the anemic. If it be the hyperemic form, the remedies should be antiphlogistic, blood-letting, purgatives, etc. In other words, all cases of puerperal convulsions are not to be treated from the same standpoint, and not in an empirical way. The point I made was this: that in these cases, there is almost always a neuropathic condition and that women who have eclamptic seizures are very likely to have other nervous disorders. The next point I made was on blood-letting. There is a retention of excrementitious matters in the blood, poisoning the nervous system, there is an accumulation of the blood corpuscles, and therefore, the blood is changed almost *in toto* adding to the irritability of the already overloaded system. Barnes states that one of the peculiarities in these cases, is the extreme irritability of the cerebro-spinal axis. It is known that when the blood retains certain excrementitious matters that should not be retained, or other poisons specific, or otherwise, vegetable, mineral or animal, it is known that such conditions lead to a state of irritability of the nervous system, and if such an irritability naturally exists, it becomes augmented. Another point taken was, that these conditions had the effect to act directly on the sympathetic system of nerves; and that that condition was irritation of the vaso-motor nerves, not being positively paralyzed, but being in a state that leads to a spasmodic condition of the blood vessels, producing a more or less persistent anemia in the cerebral circulation. I alluded to the fact that chloroform acted well, in all probability, in both the anemic and hyperemic classes of cases; that where there was an anemic condition existing in these cases, the chloroform relieved that by producing a relaxation of these blood vessels, and that where, on the other hand, there was a hyperemic condition, it is not unreasonable to suppose that chloroform produces a reduction of the hyperemia in consequence of its well known ordinary action. One of the dangers in the administration of chloroform is the superinduction of a fatal syncope; therefore, in the opposite class of cases, chloroform relieves the state of the cerebral vessels which pre-

ipitates syncope. Therefore, whatever, the condition, chloroform relieves it.

Dr. Prewitt.—In this connection the treatment is of special interest, because I want to get my patient through. But so far as the condition of the kidneys is concerned, I venture to say that there never was a case of albuminuria in which there was not congestion of the kidneys, either active or passive, and the amount of albumen is always in direct proportion to the amount of congestion of the kidneys. It may be passive congestion or an active one. Now, in this case, it is certainly not an acute desquamative nephritis—such as we have following scarlet fever, in which there is an acute erythematous disease—but there is congestion, a decided congestion, of the kidney. It may be that bleeding would relieve that temporarily, and doubtless it would to a certain extent; but would it relieve the condition so that we can hope to get the woman through for the next two months, by purgatives and other things, inasmuch as the very cause of this condition is present all the time? Now, as to its being a neurosis, if Dr. Bauduy means by that, that the convulsions are simply the result of certain nerve conditions, brought about by other conditions, we will agree in that. But if he means to say that the convulsions in these cases, are due to primary changes in the nerve centers, I can not think so. I look upon it as very much the condition of things we have in poisoning from strychnia for instance. The convulsive movements in poisoning from strychnia certainly have their origin in the spinal cord, but we would hardly call it a neurosis. And in these cases there is poisoning of the blood, and in cases of convulsions it is the cause of hyperemia of the brain I take it, and not puerperal hyperemia. In fact, in some cases I suspect it is almost exclusively that; in other cases there probably is hyperemia of the brain. But I must confess that I do not exactly understand the sense in which the doctor uses the term neurosis, as applied to this effect, but this is a side issue. I can not think that albuminuria is a mere coincidence in many of these cases. I am satisfied that in a great majority of cases of puerperal convulsions, this condition is the cause of the convulsions.

Dr. Bauduy.—I want to say very distinctly that I certainly did not mean that there was structural change in these cases.

In neurosis there is no palpable structural change. The very term implies that if there are structural changes they are not palpable. But what I meant to say was, that in these cases there is an unstable condition of the nervous element, that there is a neurotic predisposition to those eclamptic attacks, and that one woman predisposed to eclampsia in consequence of her hereditary tendencies, and transmutation of nervous disease, will develop an eclamptic attack under the excitement of pregnancy, and that another woman similarly placed, without this neurotic disposition, will not have an attack of eclampsia. Just as in men, one man will succumb to an attack of insanity under certain circumstances, if he is predisposed to it, whilst another without any such predisposition, will resist the tendency. Now, in regard to this particular matter, it is hard to define the terms. We simply mean that it is some hidden condition of the nervous system that tends to develop these neuropathic affections. If Dr. Prewitt asks me what this unstable condition is, I am free to admit that I do not consider it is explicable. But the great point in these cases, is that women develop these terrible attacks in consequence of an inherent predisposition on their part, just as they have a tendency to the development of cerebral hemorrhages and a tendency to the development of puerperal mania, and if they do not have puerperal mania at some period of their lives, they suffer from hysterical attacks, epileptic attacks, or choreic manifestations. Just so in children it is claimed that those who have a preternatural mobility of the nervous system, children of neurotic parents may, from the slightest causes, worms, indigestion, etc., be thrown into convulsions; another child will go through precisely the same influences, and have no convulsions. There is just one more point with which I take issue with Dr. Prewitt, and that is this: Dr. Prewitt has said that these conditions of nephritis and of kidney lesion are undoubtedly and unequivocally causes of puerperal eclampsia, in the majority of cases. That, from an etiological point of view, is a most important matter. I claim, as opposed to that theory, that if in two or three cases of puerperal eclampsia, it is proved that the kidneys are healthy, your theory is entirely annihilated.

Dr. Boisliniere.—Dr. Bauduy holds that this condition of the nervous system is inexplicable. This is a mere flight of the

fancy of your neuropathologists. A woman will have an attack of eclampsia and recover completely, and never have any insanity or nervous symptoms whatever. In the most perfect health she will have an attack of eclampsia and recover completely. It is sufficient to go back to the changes in the blood brought about by this kidney congestion. This also gives explanation why Dr. Barrett's suggestion is good, why everything that eliminates is good, it is because they are depurating remedies. I do not say that all these cases are hyperemic, but blood-letting will answer admirably in those cases where there is evidence of congestion—when the woman is black in the face, etc.

Dr. Bauduy.—I feel compelled to make a reply to Dr. Boisliniere. In the first place, Dr. Boisliniere has misunderstood me. As a matter of course, I meant to say that this inherent tendency is something which is not palpable. It is something that the anatomist's scalpel cannot display; it is something which is manifested by a neurotic tendency; of that fact I do not suppose there can be any possible doubt. But, even with regard to these very cases, in which Dr. Boisliniere so absolutely declares that because a woman recovers she has not a neurotic constitution, I would be able to accept that statement, if he could tell me, whether, in the number of cases he has treated in his large experience, he has inquired minutely into their history, and whether he knows the history of the mothers, grandmothers and sisters of the patients, and whether he knows what their condition was prior to his treatment, and what was after his treatment, whether he is certain that they have not died in insane asylums, or that they have not had choreic, epileptic or apoplectic manifestations. Those are very important points, so important that they can not be excluded from an investigation of this kind. Then, in the second place, as regards the treatment: In all cases of puerperal eclampsia, even in cases of anemia of the brain, venesection may be a very valuable remedy, because we know that collateral hyperemias may exist, and the threatening symptoms of collateral hyperemia are the very symptoms which are often relieved by venesection, even in cases of extensive anemia of the brain.

Dr. Maughs.—It seems that neuropathies are on the rampage at the present day, and that every thing is to be diverted into

the neuropathic line. Now, if Dr. Bauduy means by inherent tendency, in eclampsia, that a woman has a nervous system, I agree with him. I do not believe it possible to produce eclampsia in a woman who has no nervous system. If he means that it depends upon a peculiar unstability of the nervous system, I also agree with him. You might just as well expect to throw a bull into spasms by tickling his ear, as to produce eclampsia, or a corresponding condition of the brain in a red man of the prairies. It has been known for a long time that women have a nervous system, and that, like a child's nervous system, it is more mobile and irritable than in the ordinary male subject. It has also been long contended that in pregnancy there is a sort of excitability intended to meet the wants of parturition. We have, in the pregnant condition, a very ready means of accounting for puerperal eclampsia, and I dare say you will search in vain in the records of medical science to the days of Hippocrates, to prove a connection between eclampsia in the daughter and in the mother, and it has never occurred to any of them that their mother had eclampsia. It is not hereditary, don't run in the line of families, and never did. Some women, of course, would be more inclined to it than others. Phlegmatic women of coarse nervous systems would not be as susceptible to it as women of refined and delicate nervous systems. But further than that, I think that Dr. Bauduy can prove nothing. Rosenstein's theory will not stand in many cases; it has often been demonstrated to be true, and it has often been demonstrated to be not true.

A pregnant woman has not only thrown into her system the necrobiotic substance of her own system, but also that of her child's. If the kidneys be sluggish in their action, the blood very quickly becomes loaded with poisonous matters, producing a state of the system very readily inducing eclampsia.

Dr. Bauduy.—I wish to correct Dr. Maughs in this, that I never made the absurd statement that puerperal eclampsia was hereditary. I simply referred to the theory of the transmutation of nervous diseases.

Dr. S. G. Moses exhibited to the society a farrier forceps, modified by Mathier.

Dr. Boisliniere said that, in reference to the intra-uterine injections in septicæmic puerperal complications, with great quan-

tities of disinfecting water, as reported by Dr. Barret, who obtained such successful results from them—he would remark that the objection to this mode of irrigating the uterus was the necessity of frequently lifting the patient from the bed-pan, in order to empty it. In the patient's debilitated condition, this disturbance might prove dangerous. He was happy to state that this objection was entirely removed by the Improved Douche manufactured by Mr. Hernstein, of this city. It consists of a large circular japanned tin pan about four inches deep, with the opening covered over by a round, perforated air-cushion. At the bottom of the pan there is an opening, to which is attached a large hose, which allows the fluid collected in the bottom of the pan to escape into a vessel under the bed. The patient lies on her back, with the hips resting on the air-cushion, and therefore elevated above the shoulders; a large tin vessel, holding a gallon, is placed on a table about a foot higher than the patient—an india rubber hose with a female tube, directs the water from the vessel to the vagina, and, if intra-uterine injections are indicated, through a large double-cannulated male catheter into the uterus, from which it flows back into the pan, and thence through the bottom hose into a bucket.

With this apparatus, any amount of water may be allowed to flow into the vagina and uterus, and returns freely without causing shock, as the vessel, distributor of the fluid, should be placed only high enough to allow of an easy descent of the fluid.

This apparatus answers also very well for ordinary vaginal irrigations, and it is to be observed that there is no central hole at the end of the perforated vaginal tube.

Several severe accidents, and two fatal cases have been reported, as caused by the penetration into the uterus of the fluid destined only for the vagina.

In ordinary uterine (non-puerperal) cases, the return of a fluid thrown into the uterus does not take place unless the cervix has previously been dilated with sponge-tents. Hence, the danger of intra-uterine injections, which is rendered still more serious, if the uterus is retroverted with a patulous os externum under the pubic arch, especially when an abortion has taken place recently. In all probability, an inexperienced patient in these cases, will place the nozzle of her syringe just within the os, and inject her uterus with fluid more or less medicated.

Excessive uterine colic and severe shocks are not unfrequent in such events, and, as stated above, in two cases the patients have been found dead with their syringes by their sides.

Therefore, in every case, the physician should recommend to his patient to stop the middle hole of the vaginal tubes. These facts have been lately brought to the notice of the profession, and have suggested to many instrument makers the propriety of manufacturing their syringes without a terminal orifice at the middle of the vaginal tube. It is to be hoped that all will follow their example.

This Improved Vaginal Douche of Hernstein, was, some time ago, first suggested to the profession by Dr. Lombe Atthill, of Dublin, and, subsequently, modified and improved by Dr. Cleaveland, of New York, where it is extensively used by the best gynecologists of that city

Dr. Boisliniere showed also two other vaginal syringes, answering most of the indications of that medication, one by Dr. Parker, made of very fine soft rubber, with a large elastic vaginal tube, perforated at the sides with many holes; the other is called the I. X. L. Dilator Syringe, made by E. W. Schulze, of Cincinnati. It is on the principle of Maisoneuve's and Arran's syringe, with a disc to close the vulvar opening and allow of the retention within it of the fluid injected. It can be made into a self-acting irrigator by virtue of its siphon principle. It contains also an addition for a double current—for irrigating the bladder. These are invaluable improvements on the old syringes.

GRAND RIVER MEDICAL SOCIETY OF MISSOURI. ↓

The fifth semi-annual meeting of the Grand River Medical Society met at Trenton, Mo., in the Baptist church, Dec. 2d., 1879. An organization was effected at 11 A. M. The President, Wm. M. Givens, M. D., presiding. Printed copies of the proceedings of the last annual meeting were distributed among the physicians present. A committee on programme was appointed and the society adjourned till 1:30 P. M.

Society convened pursuant to adjournment. Members present: Drs. Wm. M. Givens, T. Brown, G. W. Hutchinson, A. B.

Barnes, W. E. Black, A. X. Campbell, D. F. Hanna, C. L. Webber, W. R. Berry, A. H. May, T. W. Foster and F. M. Davis. The following persons made applications and were elected members of the society: J. H. Patton, M. D., Harry Nally, M. D., F. P. Batdorf, M. D., Thos. Kunlin, M. D., S. Steward, M. D., John J. Moore, M. D., Isaac Coles, M. D., J. D. Dunham, M. D., W. H. Buren, M. D., E. J. Geisinger, M. D., J. E. Harris, M. D., and K. G. Smith, M. D.

The following amendment to the by-laws, offered at the last meeting, which had laid over under the rule, was taken up and passed:

Resolved, That section 2 of the by-laws be amended so that the officers shall be: President, two Vice-Presidents, Secretary and Assistant Secretary.

Dr. John J. Moore was elected Vice-President and Dr. A. X. Campbell, Assistant Secretary, by acclamation.

The Secretary was then called on to read a paper on Typho-Malarial Fever, prepared by M. Bottom, M. D., of Breckinridge, Missouri.

The paper was thoroughly discussed by the members of the society.

The society then adjourned until 7 P. M.

After some preliminary business, Dr. Hanna reported a case in practice, which was of unusual importance. A man 33 years of age, after several days' sickness, part of the time in a collapsed state, passed more than a quart of dark membrane. It was one-eighth of an inch thick and six inches wide. There had been no occlusion of the bowels. A piece of it was presented to the society for examination. No positive conclusion as to what it was, could be made. The patient recovered. Dr. Hanna was requested to send a piece of the specimen to some histologist for examination.

Dr. A. B. Barnes reported, in writing, a case of malformation in a child. Drs. Kunlin, Goben and Givens reported cases of the same class. The subject of maternal marks was further discussed by Drs. Hanna, Kunlin, Givens and Goben and by Drs. Campbell and Davis. A committee on programme was appointed for the next day.

Dr. Webber then announced that the physicians of Trenton had an oyster supper prepared for the members of the society.

The society then adjourned till 9 A. M. next day.

SECOND DAY'S SESSION.

The Secretary read a communication from E. A. Wagner, M. D., Vice-President, saying that on account of delay in trains, he could not reach Trenton in time to take part in the business of the society.

Dr. T. Brown read a report of a case of puerperal eclampsia in a lady 22 years of age, primipara in the ninth month. She had ten convulsions. The treatment that appeared to relieve her was large doses of chloral hydrate, verat. viride and blood-letting. When dilatation had taken place, she was delivered with the forceps. A good recovery was made.

Dr. A. X. Campbell reported a case of puerperal eclampsia, in which convulsions continued after delivery and could not be arrested till an enema, containing potass. bromide 80 gr. and tr. opii ʒj was given. She had no more convulsions and made a good recovery.

Dr. D. F. Hanna reported a case of puerperal eclampsia, which occurred both ante and post partum. He controlled the convulsions with chloroform, and the woman made a good recovery.

In the two former cases chloroform was used without success.

The subject was further discussed by Drs. Brown, Coles, Kunlin, Goben, Davis, Campbell, Moore, Hanna, Givens and K. G. Smith; some making verbal reports of cases. The discussion was very interesting, but too extensive to be given in this synopsis.

The society then adjourned till 1:30 P. M.

AFTERNOON SESSION.

On motion, the Secretary was ordered to notify all members, who are in arrears to the amount of two years' dues, that if not paid by the next meeting their names will be dropped from the roll.

The President appointed the following to attend the next meeting of the Missouri Medical Association: Drs. John J. Moore, K. G. Smith, W. R. Berry, J. D. Dunham, Harry B. Miller, A. X. Campbell, T. Brown, C. L. Webber, G. A. Goben, R. Barney and B. N. Stevens.

The following were appointed to attend the next meeting of

the American Medical Association: Drs. T. W. McArthur, M. Bottom, A. H. May and S. Steward.

On motion a committee of three was appointed by the President to select four subjects for essays for the next meeting.

The same motion authorized the President to connect the name of some member of the society with each subject.

The report of the committee, with assignments, was as follows:

Surgical Inflammation and Periostitis assigned to Dr. D. F. Hanna.

Summer Dysentery of Infants and Childhood, assigned to Dr. Wm. R. Simpson.

Unavoidable and Accidental Uterine Hemorrhage, assigned to Dr. A. H. May.

Procidentia Uteri, assigned to Dr. S. Steward.

Gallatin was selected as the place to hold the next annual meeting.

Drs. W. E. Black, G. H. Goben and D. F. Hanna were appointed a Committee of Arrangements.

A vote of thanks was tendered to the Trustees and congregation of the Baptist Church of Trenton, for their kindness in allowing the Society to hold its meeting in their church.

The following motion was adopted:

Moved that the thanks of the Society be tendered to the physicians of Trenton, for the hospitality shown to the members of the Society.

By vote of the Society, the Secretary was requested to have a synopsis of the proceedings of this Society, and Dr. Bottom's essay, published in some of the St. Louis medical journals.

The Society then adjourned to meet at Gallatin, on the first Tuesday of June, 1880.

T. BROWN, M. D., *Secretary.*

AMERICAN PUBLIC HEALTH ASSOCIATION.

SEVENTH ANNUAL MEETING, HELD AT NASHVILLE, TENN

(Continued.)

The second day's programme was as follows :

MORNING SESSION.

10 A. M. Opening with prayer by Rev. T. A. Hoyt, D. D.

1. Election of new members.

2. City scavengering at Boston, by Eliot C. Clark, C. E., of Boston.

3. On methods of removing garbage in New Orleans, by Hugh Miller Thompson, D. D.

4. Discussion on above papers.

5. Some questions of municipal sanitation by Dr. E. G. Janeway.

6. Discussion on the paper.

Adjournment at 1 P. M.

AFTERNOON SESSION.

3 P. M.—Reading of papers as follows :

1. The protection of the innocent and helpless members of the community from venereal diseases and their consequences, by Dr. A. L. Gihon, Medical Director United States Navy.

2. Discussion.

4:30 P. M.—Report of the Executive Committee on proposed constitutional amendments.

Adjournment at 5 P. M.

EVENING SESSION.

7:30 P. M.—May not yellow fever originate in the United States? Etiological study of the epidemic at Savannah in 1876, by Dr. Alfred H. Woodhull, United States Army.

In the absence of Elliot C. Clark, Dr. Folsom, of Boston,

Secretary of the Massachusetts State Board of Health, read his paper, which was an elaborate report of the scavengering of Boston. The same report had previously appeared in print, however, and has probably been read by many of our readers.

Rev. Dr. Hugh Miller Thompson's report on the methods of removing garbage in New Orleans, was exceedingly interesting. We give it in full:

DISPOSAL OF THE GARBAGE AT NEW ORLEANS.

We have choice of three ways to rid ourselves of the sewage of a city, but whether we choose water carriage, pneumatic pressure, or the scavenger carts, the garbage still remains. There seems to be no way to remove this, but by the shovel and the cart. The question, then, about garbage does not concern so much its removal from our streets and about our dwellings, as the disposal of it after such removal. A favorite method in New York was, and I am not sure but is now, to use it to fill lots sunken below the street grade. The deposit of hundreds of tons of mingled ashes, cabbage stalks, rotten potatoes, and other kitchen refuse, mingled with dead cats, rats and the like, as a foundation for a future dwelling, does not strike one as being a wise sanitary proceeding for the present or the future, nor one that commends itself to the tastes or nostrils of civilized people. Still, one can see that, in such disposal, there is an element of economy which commends itself to the merely business mind. The lot needed filling, and kitchen sweepings were a convenient and cheap material. It is not, to the strictly business mind, and, especially to the official mind, any part of its business to look further. If, as in New York, where earth and rock are easily attainable, such a practice was found economical, it is no wonder that in New Orleans, where clean dirt is very scarce, exceedingly dirty dirt should be used in its place.

There was a "dumping ground," so-called, established back of the narrow city on the edge of the swamp, and thither were brought the dead dogs and cats, the kitchen garbage, and the like, and duly dumped. This festering, rotten mass was picked over by rag-pickers and wallowed over by pigs, pigs and humans contesting for a living in it, and as the heaps increased, the odors increased also, and the mass lay corrupting under a trop-

ical sun, dispensing the pestilential fumes where the winds carried them.

But streets needed filling, and lots also, and here, to the official eye of the contractor, was a quarry, ready at hand, for the purpose. Will it be believed, that, actually, this horrible compound of offal, carcasses of animals, refuse of kitchens and sinks—this mass of reeking abomination—was carried back into the city and used to make streets and fill up hollows; dumped back again before the doors and windows of people who had not been sentenced to death for any crime?

In a letter to the Board of Health upon the subject of a complaint that a street contractor was “burying dead dogs, etc., in the middle of Jackson and Phillips streets,” the Administrator of Improvements (!) defends himself by saying: “It has been a long-established custom to deposit offal, etc., on vacant squares in the various districts of the city. I believe it to be an advantage to place them on some of the low streets, where, mixed with ashes, etc., they can be used in raising the grade of such streets and rendering them passable”!

This officer was only carrying out the traditions of his office, doing as everybody else had done, in thus disposing of offal, garbage and carcasses, and but for the epidemic of 1878 which followed, it might be going on still.

When the Auxiliary Sanitary Association was formed last year, one of the first practical questions that came before it was the disposal of garbage and offal. That the hitherto prevailing practice of utilizing it for street making and lot filling would not answer, was pretty well settled. Whether the yellow fever of the previous summer was or was not intensified by filth, the association did not care to debate. On the general principle that rotten garbage and dead dogs are not healthy compost for macadamizing the streets of a great semi-tropical city, they determined to dispose of these substances in some other fashion.

There was talk of cremation. It seemed impractical and expensive. There was talk of utilizing the garbage by converting it into a fertilizer, a beautiful and attractive plan, which, clearly, in the rich lands of Louisiana at least, would not pay, and which would still necessitate the use of a “dumping ground” and the handling and picking over of the filth.

There remained the river. It runs by New Orleans with a velocity of from two to four miles an hour. Its depth is between one hundred and two hundred feet. It is a vast, swift body—the accumulated drainage of half a continent. It was seen that nature had provided, as usual, for man's needs, if only man had the sense to use the provisions. Once in the Mississippi river, the garbage would be sent about its business for good.

The daily accumulation is about five hundred cart loads. The city is narrow and long, having a river front of seven miles, closely built.

The Auxiliary Association built and presented to the city three scows, costing \$1,550 each. They are placed at special wharves along the river front, and to them the garbage carts are driven, and into them dump their contents. At 4 P. M. each day a tug picks up the scows, tows them two miles down the river, below the city, when the garbage is dropped into the stream, and disappears in the devouring jaws of gar, pike, cod-fish, and other greedy denizens of the great stream, who attend in countless numbers at their daily dinner hour. What is spared by them is whirled away in the waters, and not a trace of any part of the offensive matters can be discovered four miles below.

The scows are thoroughly washed out by the powerful steam pump of the tug, and, clean, sweet and odorless, are returned to their respective wharves.

These scows have so thoroughly performed their duty and have proved themselves, in rough weather, such good sea boats, that an explanation of their construction may not be amiss.

The scows are 60 feet long by 22 feet beam over all on deck; bottom 50 feet long by 20 feet wide over all, raking fore and aft 5 feet; depth over all 8 feet; dump compartment or hold, 36 feet long to bulk-head. Capacity, 250 cart loads.

Two doors on each side swing on strap hinges and are fastened by sliding bolts. It is found that these bolts can be raised without difficulty, permitting the doors to swing freely outward, causing a sudden and complete discharge of the load.

The boats are loaded from a wharf which projects over the boat to the center fore and aft. When the carts are dumped their contents fall equally into both sides of the hold, the floor of which slopes to each side at an angle of 45 degrees.

It will be seen that, the load pressing against the doors, it is only necessary to raise the bolt in order that the contents should slide instantly into the water.

The discussion, which followed, was participated in by Drs. Azel Ames, of Mass.; A. N. Bell, of N. Y.; W. Brewer, of New Haven; W. F. Campbell, of Augusta, Ga; Col. Waring, of R. I.; Dr. O. M. Wright, of Milwaukee; Dr. Ezra N. Hunt, of N. J.

The paper of Dr. Gihon, of the U. S. Navy, entitled, "The protection of the innocent and helpless members of the community from venereal diseases and their consequences," was a sensational, and to the lay reader, a startling presentation of some old and well known facts and some new and terrifying fancies.

If the publication of such papers could be confined to medical journals it would be well, but unfortunately such is not the case, and they are read by scores of syphilitic sufferers, who become moral, mental and physical wrecks, as a consequence.

The intelligent physician knows that nine cases out of ten of syphilis are amenable to treatment and a perfect cure; then why this eternal harping upon the horrible phases and eternal continuance of the disease?

On motion, a committee was appointed by the President to consider the substance of Dr. Gihon's address, and report at the next meeting a plan for preventing the spread of venereal disease.

The task is an arduous one and it is to be hoped the committee may succeed in formulating something practical.

The topic for discussion at the night session was the enquiry: "May not yellow fever originate in the United States?" An elaborate paper, entitled "An etiological study of the epidemic at Savannah in 1876," by Dr. Alfred A. Woodhull, U. S. Army, was read by Dr. Ezra M. Hunt, Secretary of the State Board of Health, New Jersey.

Dr. Woodhull claims that the epidemic of '76 did unquestionably originate in Savannah, and was not traceable to importation. His paper was very elaborate, and embraces so many ascertained facts bearing on the subject, that no satisfactory statement of its contents can be given in the limited space per-

mitted. A mere outline will serve to indicate the general course of his argument and its leading points.

The first publicly recognized case occurred on the 12th of August, but it was afterwards proven that the first case occurred on the 23d of July. Between that date and the 20th of August the fever appeared at five other distinct and widely separated points. Five separate outbreaks occurred, and from each of these points the disease radiated in all directions, until the boundaries intermingled, and the fever prevailed everywhere.

Dr. Woodhull spent four months in making minute investigations into the history of each one of these earliest cases, in each instance found that there was not only a failure to connect them with any vessel, cargo or baggage from any infected port, but there was in each instance a local cause which would explain the occurrence of the seizure. So clearly did this appear, that the doctor was compelled to abandon his pre-conceived ideas upon the subject, and accept the conclusion that the disease originated independently of any foreign intercourse.

Five vessels—one British and four Spanish—arrived from possibly infected ports a short time previous to this outbreak; they remained from five to twenty days at the wharves, and left without any cases of fever occurring among their crews. Owing to the prevailing malarial condition of the shores of the river, their crews slept in the city, carrying their bedding from the vessels to their boarding-house—all this without any cases of fever occurring, either among their number, or in any of the houses where they were lodged. The first case which occurred was that of a sailor attached to a coasting schooner for thirteen months preceding, during all of which time the vessel had not left the United States. The crews of the vessels which came from Cuban ports were all exempt from fever from first to last.

A remarkable case was that of a parish priest, which occurred on the 13th of August. At that time there were but two foci of the disease in the city. In this case not the faintest clue could be traced to any outward infection. The manifest cause was to be found upon the spot. A few yards distant from the priest's sleeping apartment, under the same roof, was located a water-closet and bath room, an interior apartment having no ventilation except by a door and by windows com-

municating with adjoining rooms. It was supposed that there was connection with a sewer, but an examination proved that the soil and waste-water pipe emptied into an old well in the back yard of the house. At the time the premises were examined, March, 1877, the odor of a foul closet was very perceptible, and it was stated that the air of the house was never free from the taint.

Another case was that of a child who had been in the habit of playing along the bank of the Bilbo canal, and swimming his dog in the water of the canal and of a drain leading into it, both of which were in a filthy condition from the drainings of water-closets, surface privies and similar sources. In all the other cases, minutely described, similar conditions, accounting for the sickness, could be traced.

Having given examples of foci, distinct and independent from which the disease radiated, he said all these primary cases had a common exposure. He gave examples, also, in which cases occurred, which indicated no connection with pre-existing disease. There had been cases in Savannah. Cases comparatively isolated from other cases arose after ten days' or more interval; and there was nothing known of the nature of the disease as occurring in Savannah, which was contrary to its long observed and well recognized laws. He did not deem importation necessary for the production of the fever, because inoculation was not proved. No one denies the propagation of yellow fever from pre-existing cases under favorable circumstances. Spontaneous generation was held out as the only alternative belief for those who respect the necessity for the uninterrupted connection of every case with preceding cases.

Specific germs may be floating in the air of ill-kept and crowded wards awaiting a favorable receptacle. It is reasonable to believe when the germs are once diffused, they generally retain their characteristic affinities. Frost puts an end to the propagating power of the fever.

The degree of cold that will extinguish an epidemic does not devitalize the fever cause.

The germs may survive indefinitely under favorable condition of fertilization. The fever cause may arise from an infinite variety of self-propagating germs, which may gradually yield to adjacent influences, as in vegetation and animal life.

The fever case may be compounded of first emanations from decomposed organic matter, under meteorological and other conditions not yet clearly comprehended, and possibly intensified by a passage through the human body. Yellow fever occupies a middle position between the ordinary malarial, and true specific disease. It resembles the former in that it only spreads under certain favorable climatic conditions. In Savannah, much of the city was prepared like the Happy Hollow vicinity of Memphis in '73—a very nursery for the ravages of the disease.

At Memphis the disease spread from direct importation. No importation is proved to have been the case at Savannah. Distinct outbreaks, he thought impossible from single importation. In all regions where the disease has raged fiercest, it has been found the pollution of the soil by human excreta, is most marked. He did not, by any means, intend to be construed as depreciating the importance of a judicious and efficient quarantine. New York had, through quarantine, but one avenue to watch to exclude the epidemic, but at the South, one break in the long cordon from the Chesapeake to the Rio Grande, may allow the disease foothold, and then land, as well as sea, must be guarded. Quarantine was useful. Cleanliness was a vital consideration, especially in the lower latitudes.

The third day (Thursday) was occupied by the election of officers, and the following papers:

“Rotten Wood,” by Dr. Wm. H. Brewer, President State Board of Health of Connecticut.

“Cotton as a Fomite,” by Dr. J. D. Plunkett, President Tennessee State Board of Health.

“Memphis Yellow Fever Epidemic of 1879,” by Dr. G. B. Thornton, President Memphis Board of Health.

These papers were discussed by Drs. Elisha Harris, of N. Y.; S. A. Hargis, of Florida; E. M. Hunt, of N. J.; Jno. Peters, of N. Y.; Dr. Bailey, of Louisville, and Dr. D. C. Holliday, of New Orleans.

Programme of Friday (4th day).

9:30 A. M.—Opening with prayer by Rev. F. A. Shoup.

1. Election of new members.

2. Quarantine and its results in the State of Arkansas in 1879, by Dr. R. G. Jennings, of Little Rock, Ark.

3. Report of the Committee of the New Orleans Medical and Surgical Association, on the subjects submitted by the Executive Committee of the American Public Health Association, to be read and discussed at this meeting; presented by Dr. D. C. Holliday, of New Orleans.

4. Camps and depopulation at Memphis; epidemics, 1878-79, by John F. Cameron, of Memphis. (Limited to fifteen minutes.)

5. On steamboat inspections, by Dr. A. N. Bell, of Brooklyn, N. Y. (Limited to fifteen minutes.)

6. Resolutions and reports of committees relating to public health legislation.

7. Discussion on the above.

The following are the main points in Dr. Holliday's report:

To deal with a city in the yellow fever zone, in order to prevent the appearance of a first case—put such city in the best possible hygienic conditions.

As to drainage, there should be proper elevation and grading of the surface of the soil. All surface gutters to be provided with sides and bottoms of masonry or chemically prepared wood, to facilitate flushing. All yards to be graded, so as to drain into the gutters. All streets to be properly graded and paved. Banquettes carefully constructed. All privy vaults, where existing, should be required to be so remodelled as to avoid all possibility of seepage. In the construction of new privies, every care should be taken to remedy the defects of the present system.

We would suggest, as applicable to most houses already built, such practical alterations as would improve their general sanitary condition; *i. e.*, elevation of the lots upon which they stand, to avoid all stagnant water, and such alterations as are deemed necessary to improve their ventilation.

In building new houses, there should be an ordinance enacted and rigidly enforced by the proper authorities, requiring a specific elevation of the whole lot to be built upon, above the level of the street—such ordinance to be complied with before the foundations are allowed to be commenced.

We would suggest *thirty inches* as the minimum elevation for the floor above the surface of the lot.

No tenement houses to be allowed, to favor accumulations of filth, and thereby the production of disease.

Sufficient light and proper ventilation are essentials to health, also an abundant supply of *pure* water.

Where cisterns are used, the greatest care in their construction and management is necessary.

All accumulations of garbage or filth to be specially prevented.

Extensive excavations or disturbances of soil, to be forbidden from May to November.

The thorough police of the city by trustworthy and competent sanitary inspectors.

To prevent the importation of a first case, adopt a rational quarantine under the direction and management of physicians of undoubted capacity and recognized integrity.

Require all vessels, at all seasons of the year, to be subjected to careful inspection by the quarantine physician and to be subjected to such detention as he may deem necessary for efficient cleansing or disinfection. Establish a quarantine hospital for the treatment of infectious or contagious diseases arriving at quarantine.

Every means should be adopted to insure the earliest information to the health authorities regarding suspicious cases.

Isolate the locality, and delegate to the proper authorities sufficient power for a thorough and repeated disinfection. All clothing and bedding of patients should be thoroughly disinfected by heat, or destroyed. In case of death, immediate *private* burial to be insisted upon.

We do not believe that yellow fever is contagious, communicated from body to body, but that the cause, whatever it may be, spreads through the atmosphere, and that a certain amount of the poison in this medium is necessary for its manifestation. That its spread is not by diffusion, otherwise it would grow less and less in intensity; but that it is capable of multiplying in some way, as yet unknown to us, thereby increasing the intensity of its infection. That this atmospheric infection tendency, while greatly due to, is not wholly dependent upon heat and moisture, but that the presence of decomposing organic material and the gases therefrom, enter largely as a factor, if not in its production, at least in its spread; and that cleanliness of person and surroundings will go far towards preventing its spread, if not securing its entire eradication.

The removal of the unacclimated from the place of infection is a measure of wisdom, and would save many lives. The presence of the disease and its disposition to spread, as manifested in the successive attacks of several members of the same household or adjoining households, should be the signal for the general removal of the unacclimated, for the rapidity of its spread is evidence of its intensity.

When the disease has progressed to such an extent as to render a place *dangerously infected*, within the meaning of the term as employed by the National Board of Health, we would recommend the removal of all persons liable to infection, and regulate intercourse so as by all possible means to prevent the ingress of unacclimated persons.

Each infected district should have its own hospital, centrally located, of sufficient capacity to meet all wants, and presided over by a staff of medical men of standing and reputation in their profession and community. Each hospital should have its ambulances, easy and comfortable, and every patient dependent on charity for his support and medical treatment, if discovered within the first twelve hours after the invasion, should be removed to said district hospital. The hospital staff should have entire control of the district, and such patients as have been sick for twelve or more hours should be treated at their place of residence by this staff, and their necessities should be relieved from the hospital upon the order of the attending physician.

We recommend the adoption of such measures by the National Board of Health as shall secure, during the prevalence of an epidemic, the abolition on railroad cars of all upholstered articles of furniture, rugs, carpets and such other material not washable, as well as other material capable of conveying infection, and the substitution therefor of mattresses, chairs, seats, etc., made of wire, cane, wood or other open material. That the cars, especially sleeping cars, if used, be open to free ventilation, as there can be no better purifier than the current of air which passes through cars when in rapid motion. Also, that all articles of bedding be thoroughly washed in boiling water after leaving point of departure.

Transfer stations should be under the supervision of competent medical officers, subject to the rules and regulations of the National Board of Health.

As relates to the inspection of steamboats, we recommend the same regulations in regard to furniture as already mentioned for railroad cars, and the faithful execution of the rules already adopted by the National Board of Health, and put into use last summer at New Orleans.

The report concludes with a summary of the valuable results reached through the coöperation of the National Board of Health, in preventing the spread of the fever in 1879.

Col. Cameron's history of the camps and depopulation of Memphis—epidemics of '78-9—thoroughly demonstrated the advisability and practicability of complete isolation.

The remaining time of the association was principally occupied in the discussion of the foregoing papers, the passage of complimentary resolutions, etc.

The officers for the ensuing year are: Surg. Jno. S. Billings, U. S. A., Pres.; Dr. S. Choppin, N. O., 1st Vice-Pres.; Dr. R. C. Kedzie, of Lansing, Mich., 2d Vice-Pres.; Dr. J. B. Lindsley, of Nashville, Treasurer.

New Orleans was selected as the place of meeting next year.

MISCELLANEOUS NOTES.

The American Public Health Association was organized at Long Branch, in September, 1872, and Dr. Stephen Smith, of Washington, D. C., was elected President. A meeting of the Association was held in May, 1873, in Cincinnati, and in October of the same year, in New York City. Dr. Smith continued as President until 1874, when the Association met in Philadelphia, and Dr. Toner, of Washington, was elected. Dr. Snow, of Providence, R. I., was elected in Chicago, in 1875; Dr. J. H. Rauch, of Chicago, at Boston, in 1876; Dr. Elisha Harris, of New York, at Chicago, in 1877; Dr. J. L. Cabell, of the University of Virginia, at Richmond, in 1878, and Dr. J. S. Billings, U. S. A., at the present meeting of the Association.

Two hundred new members were registered during the late session of the Association. Those not in arrearage for annual dues now number 700. Members delinquent two years are dropped from the roll.

We heard, on every hand, expressions of gratification at the results of the meeting. It was the general opinion that the meeting of this year was the most pleasant, largest and generally successful that has ever been held.

Dr. Austin, of New Orleans, has gone through forty successive sieges of yellow fever in that city.

President J. L. Cabell, M. D., was a most graceful, courteous and efficient presiding officer.

Dr. George Homan, of St. Louis, represented Missouri upon the advisory board of the Association—a most efficient representative.

The people of Nashville seemed to vie with each other in the extension of courtesies to the members in attendance.

Dr. J. Berrian Lindsley, Health Officer of Nashville and local secretary of the committee of arrangements, was untiring in his attentions, and declared by all to be the right man in the right place.

Dr. A. N. Bell, the veteran sanitarian of N. Y., never opened his mouth in the convention, except when he had something to say. What he said was always good, and he always said it well, and he had a great deal to say, too—but none too much.

Col. Edward Fenner, president of the Auxiliary Sanitary Committee of New Orleans, was present, and, considering his character and ability, we regret the medical profession cannot claim him as its own.

We may boil down the various papers presented and the discussions which followed, and we have as a result, these conclusions :

Whether disease be dependent upon a specific poison or not, isolation of localities infected is desirable. Whether yellow fever be an exotic or the reverse, careful cleanliness and the severest sanitation on the part of individuals, families, municipalities and States, is desirable. Though a house or an aggregation of houses—a city—be scrupulously clean on the surface, if badly drained and poorly ventilated, it may escape yellow fever, but diphtheria, typhoid fever, or deadly disease in some shape will surely find it out and levy upon its guilty or ignorant inmates.

Col. Hardee, of New Orleans, and Col. George E. Waring, of Newport, R. I., civil engineers, impressed the members of the Association most favorably.

NOTES AND ITEMS.

WE UNDERSTAND that the fourth volume of the *Medical and Surgical History of the War* is passing through the hands of the binder, and in fact, that many copies have already been issued. It may not be generally known that Congressmen are entitled to many copies for gratuitous distribution—Senators 40 each, Representatives 16 each. Members of the profession desiring the work, should apply promptly to Congressmen for it.

IF any of our subscribers have failed to receive their copies of the *COURIER*, they will confer a favor upon us by notifying us at once, so that such mistakes may be rectified. Having made new arrangements for the printing and mailing of the *COURIER*, we hope to avoid such mistakes in future.

WE have already noticed the announcement of the "*Alienist and Neurologist*," of which the first number is now before us. We congratulate Dr. Hughes upon the appearance of the new journal, and are assured that, under his management, it will prove a valuable periodical in a comparatively unoccupied field of medical journalism.

THE DAILY PAPERS have announced the death of the celebrated London Physician, Dr. Budd.

MORTALITY TABLE.

For the Week ending December 20, 1879.

CITIES.	ESTIMATED POPULATION	DEATHS.	DEATH RATE PER 1,000.
New York.....	1,097,563	1,970	23.4
Philadelphia.....	901,380	1,069	15.5
Brooklyn	564,448	825	19.0
St. Louis.....	500,000	463	12.0
Chicago.....	460,000	716	17.3
Baltimore.....	400,000	597	19.5
Boston.....	375,475	554	19.0
San Francisco.....	300,000	307	13.3
Cincinnati.....	280,000	372	17.3
New Orleans.....	210,000	392	24.3

ST. LOUIS COURIER OF MEDICINE

—AND—

COLLATERAL SCIENCES.

VOL. III.

FEBRUARY, 1880.

No. 2.

ORIGINAL ARTICLES.

PLASTIC BRONCHITIS.

BY W. C. GLASGOW, M. D., ST. LOUIS.

[Extracted from Transactions of the American Medical Association, with additional cases.]

I PRESENTED, Mr. President, to this section, at our last meeting in Buffalo, casts which had been expectorated by a man suffering with plastic bronchitis; the accompanying cuts are from a photograph of the casts, taken a few days after they had been expectorated. Owing to lack of time, I had no history to report, and it is in accordance with the resolution of the section, as moved by Dr. Rich, that I now report the history and treatment of the case during the past year.

In addition, in order to give more interest to the report, I have endeavored to ascertain, as far as possible, the experience of leading American physicians in the disease. With this end in view, I addressed letters to many of our prominent physicians, in different sections of the country, and have received from the majority most courteous replies.

I have been fortunate enough to collect a few cases which

have complete histories; the mass of the testimony, however, relates to fragmentary histories of cases. Still, sufficient has been gathered to show the comparative rarity of the disease, and some of its prominent symptoms.

The history of the case which is the occasion of this paper, is as follows:

June 2, 1878, Dr. John Mayger, of St. Louis, brought to my office the patient, John B——, aged seventeen years. He is 5 feet 11 inches high, weighs 133 pounds, is of spare build and somewhat emaciated, having a decidedly anemic appearance. He is of perfectly healthy parentage; mother and father both living. By occupation he was a farmer, and occasionally worked as a painter.

FIG. 1.

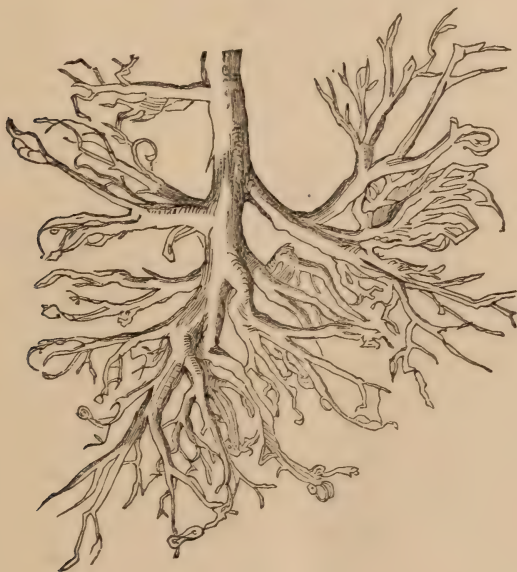


Bronchial cast, reduced one-half, from photograph.

In early life he had many attacks of spasmodic croup, and at six years of age, became affected with a pustular eruption over the entire body, which continued in spite of treatment for over a year. With this exception, his health has been generally good, until about a year ago, when, having fallen from a raft into the water, he took a violent cold and had a cough which lasted about two months. During the following six months, he seemed to be perfectly well,

with the exception of a slight hacking cough. He then noticed, for the first time, small bits of cast occasionally in the expectoration. He expresses himself as having felt a tightness or sense of oppression in the chest, or rather a feeling of want of air, which was especially apparent when painting in a close room, exposed to the odor of paints and oils. He also complained of a feeling of heaviness and stupidity, especially in the mornings, which at times rendered him incapable of continuing his work.

FIG. 2.



Bronchial cast, reduced one-half, from photograph.

He removed to the country, and in a few weeks noticed the entire disappearance of the fibrinous particles from the expectoration, and seeming return of perfect health. After several months, he returned to the city, and resumed his business as a painter. Bits of membrane or cast again appeared in the expectoration, and the old feeling of stupidity and oppression in the chest, again became very marked. He was suddenly taken with a violent chill, which lasted several hours, and this was followed by high fever, continuing nearly twenty-four hours. During the

fever, he had frequent and violent paroxysms of coughing, with an intense feeling of suffocation, or want of air. About 10 P. M., having taken a drink of water, it was immediately vomited, and this was repeated several times. Some two hours later, during a paroxysm of coughing, a large mass was expectorated, which proved to be a bronchial cast (see Fig. 1); he immediately experienced a sense of relief; the tightness of the chest disappeared, the cough ceased, and he slept soundly till morning. Next morning, having taken a cup of tea, he complained of a feeling of nausea and heaviness over the epigastrium; a slight hacking cough came on, and without any effort, a large mass arose in his throat, which also proved to be a large cast. (See Fig. 2.) The sense of oppression immediately disappeared, and he felt perfectly well, with the exception of a slight soreness under the middle of the sternum. Physical examination showed percussion sound to be negative; on auscultation, there was found a diminution of the respiratory murmur over the middle of the left lung, near the angle of the scapula, where a few sub-crepitant râles of rather dry character could be heard. The respiratory murmur over both lungs was feebler than usual.

I prescribed for him ten grains of iodide of potassium and ten drops of the syrup of iodide of iron, to be taken three times a day. He continued this treatment for ten days, when it was omitted on account of nausea. I then gave him ten-drop doses of the syrup of the iodide of iron, on sugar, twice a day after meals, and in addition ordered an inhalation of the ethereal extract of tar with carbolic acid, to be used every night. He continued this treatment about a month, then omitted the evening doses of iodide of iron, but continued the morning dose, and used the inhalation every evening.

I saw him again June 17th, when he reported that he was feeling perfectly well, though still expectorating small bits of casts.

June 19th he expectorated two large casts, one after the other, which came away after a few slight coughs, during the efforts of clearing the nostrils by hawking. June 21st

he came to my office, and, whilst there, expectorated several pieces without the slightest effort. Until about the middle of July, he continued to expectorate small particles of casts. They disappeared then entirely. The larger branches were hollow, whilst the smaller ones consisted of solid filaments.

The first casts expectorated were of a pearly white color, of firm consistency, the smaller branches presenting the appearance of fine, perfectly defined threads; the later casts, showed a decided change in consistency and firmness, the external coats appearing softened, whilst the finer filaments lost their well-defined rounded form, and in some cases appeared as bundles of disintegrating fibrillæ, presenting an appearance similar to that given to the earlier casts after having remained some time in a solution of chloral. This change in the character of the casts, I think, we can truly ascribe to the action of the remedies; whether due to the influence of the iodide of iron or of the inhalations, remains an open question. The iodide of potassium was first given on account of its well-known influence on inflammation of the bronchial mucous membrane. The iodide of iron was added for its tonic effects, and with the view of continuing the influence of the iodine. The inhalations of tar and carbolic acid were prescribed with the hope of their having an alterative effect, in changing the specific character of the inflammation and preventing a re-formation of the casts. The happy effect of the preparations of tar in resolving chronic inflammations of the skin, was considered, and a similar good effect on the bronchial mucous membrane was hoped for.

He continued the above treatment faithfully seven months, when, feeling, as he expressed it, "rawness and soreness in his lungs," he discontinued all treatment.

I saw him May 1, 1879. He states that he is, and has been during the fall and winter, in perfect health. He has gained ten pounds in weight, has lost his anemic look, and has no cough.

The experience of some of our leading physicians in this

disease will be seen from the following extracts from personal letters:—

Dr. T. G. Richardson, of New Orleans, writes, “in a practice extending over nearly one-third of a century, I have never encountered a case of plastic bronchitis.”

Dr. W. H. Geddings, of Aiken, S. C., has “never met with a case.”

Dr. F. Peyer Porcher, of Charleston, S. C., says, “in a hospital practice of fifteen years, with numerous post-mortems, I have never seen a single case,” but he refers to one, the cast of which is in the Medical College Museum, and the history is reported in the *Transactions of the South Carolina State Medical Association*, 1874.

Dr. T. Grange Simons, of Charleston, refers to a case in his practice, “occurring in a negro child four years old.” When first seen by him, it had been ill for several days with the symptoms as of acute bronchial catarrh, and had expectorated several casts of the bronchia. It died within thirty-six hours. He notes the occurrence of two cases in the practice of Dr. J. M. F. Geddings, both of which were in adults, recurring periodically, and were dependent on bronchitis. He also notes a case as reported by Dr. T. T. Robertson, of Winsboro’, S. C.

Dr. Jerome Cochrane, of Mobile, writes, “the disease is wholly unknown in this section of the country.”

Dr. James H. Hutchinson, of Philadelphia, says, “during a long connection with the Pennsylvania and Episcopal Hospitals, I have only seen one well-marked case, and have never had a case under my care.”

Dr. H. I. Bowditch, of Boston, writes, “I do not remember ever having recorded or treated a single case during my whole professional life, since 1835.”

Dr. R. H. Fitz, of Harvard College, has “seen four specimens of casts during a period of nine years.” The histories of these cases gave few and trivial symptoms; at the most, a slight cough. Structurally, the casts were composed simply of cells and mucus, and I have therefore considered them to be the result of limited bronchitis, with retention and partial inspissation of secretions.”

Dr. Theophilus Parvin, of Indianapolis, has "had no case" in his practice.

Dr. James T. Whittaker, of Cincinnati, O., has "had no personal experience with the disease."

Dr. Geo. P. Andrews, of Detroit, "I have never seen or heard of a case in my section."

Dr. Roberts Bartholow, of Cincinnati, O., writes: I have seen one well-marked case in which a complete cast of the tubes on one side was expectorated, down to at least the bronchioles. It came away almost entire. Microscopically, it consisted of a fine reticulation of fibres and mucous corpuscles. The case presented the ordinary signs and symptoms of capillary bronchitis, and terminated fatally by catarrhal pneumonia."

Dr. Jas. R. Leaming, of New York, has "seen two cases of plastic bronchitis, both in consultation. One of these died later of diphtheria."

Dr. Austin Flint, of New York, writes: "I have met with three cases of plastic bronchitis; one case occurred in a man in middle life, of intemperate habits, and was fatal. In a second case, I received quite an extensive cast, with the history, that the patient was a young woman, who had had repeated attacks, during which she had expectorated large quantities of similar casts. A third case was that of the late Dr. Stephen Rogers, reported in the *New York State Medical Association Transactions*, 1866, and which is now in the Museum of Bellevue Hospital."

Dr. Flint also notes a case of a patient with phthisis, in which casts of a portion of the bronchial tree were expectorated, after profuse and persistent hemoptysis. Microscopic examination proved that these casts were formed by coagulation of the effused fibrine of the blood, and hence it was not a case of true plastic bronchitis. He also notes a case, "of a man who died of bronchial hemorrhage, in whom the bronchial tubes of the whole of one lung were occluded by discolored fibrine."

Dr. Gleitzman, of Ashville, records one case seen in a lady with early phthisis. She recovered.

Dr. J. M. Da Costa, of Philadelphia, writes: "I can not

recall the number of cases that I have seen in practice, but I have in my collection two fine specimens of casts of plastic bronchitis; one, very large and giving complete casts of bronchial tubes on both sides, occurred in a young girl, and it came away after an emetic: the case recovered. The second case was a man. In this case a large plug completely obstructed the left bronchial tube, and its expulsion was preceded by several hemorrhages."

Dr. Alfred Stillé, of Philadelphia, kindly sends me the full history of a case of which he has the casts, and which was reported to him by Dr. Wm. B. Lank, of Finleyville, Pa. "A. G., a blacksmith, æt. 25, of great physical power, began to suffer, without any apparent cause, with shortness of breath, and a sense of constriction of the left side of the chest, and with irregular and violent action of the heart; there was no pain, cough or fever. The dyspnœa was so severe at times as to threaten life. These symptoms continuing for two months, ascites and edema of the legs occurred, the face was livid, the expression distressed, and lying down was impossible. A state of somnolency was almost continual. Besides the disorder of movement of the heart above mentioned, there was jugular pulsation. The left side of chest dull on percussion, right side abnormally resonant. In the left lung, respiration was bronchial with sibilus; in the right, exaggerated.

"Dr. Lank took charge of the patient in the eleventh week of the attack, gave him egg-nog and iron, and applied a large blister to the left side of the chest. Within forty-eight hours, expectoration of a sero-albuminous liquid began, and moist râles were heard over the left lung; there was little or no cough. A second blister was applied on the fifth day, and, on the sixth, the patient was almost choked by coughing up a large quantity of casts of the bronchial tubes, 'white as pearl, lustrous as satin, and exhaling an extremely unpleasant odor.'

"The quantity of expectoration of this sort was nearly a quart from first to last. The casts had often to be extracted from the throat with the fingers. Directly after this expectoration, breathing became free, the heart regular, and

the jugular pulsation ceased. For two months longer some casts continued to be expectorated, and, a few weeks later, the patient regained his former health."

Dr. Alison Maxwell, of Indianapolis, gives me the history of a case as reported by Dr. Thomas L. Murdock, of that city.

"I was called, Jan. 3, 1877, to see Florence Von C., a girl eight years of age, rather large, of light complexion, and scrofulous diathesis. She had been having violent but not frequent coughing spells, some dyspnœa, with very little expectoration and occasionally slight pain and soreness in the right side. Has also had 'light chills, followed by fever and sweating each alternate evening.' The appetite was good, and she felt playful and well most of the time. This condition had existed about two months; she had been taking cough mixtures and quinine, but had not been under the care of any doctor. There was no hoarseness at any time. The larynx and trachea were healthy, and from previous history and present appearances, no trace of diphtheria or croup could be detected. Nothing abnormal could be found on percussion. The respiratory murmur could not be heard over a small, well-defined space in the region of terminal branches of bronchus leading to middle lobe. The case was thought to be one of circumscribed chronic catarrhal bronchitis, with some pneumonitis or collapse of air cells. The treatment consisted of chlorate and iodide of potassium, with chloroform and belladonna, to allay the violence of the cough, and wild cherry, cod-liver oil and quinine for tonics; also, external applications of iodine and warm poultices. Previous to February 16th, some thick tenacious matter was expectorated, but nothing suggesting false membrane. On that day, while coughing, a dense, firm membrane about two inches in length, and one-fourth inch in diameter at the largest extremity, being a perfect cast and distinctly showing the bronchial subdivision, was coughed up. After the expulsion of this membrane, the cough and irritation almost instantly subsided with very little expectoration, and none that would be called purulent or

bloody. In less than a week, the lung action became normal, and no more trouble has been experienced to the present time, about two years. A microscopical examination made by Dr. Maxwell showed numerous pus corpuscles with a few red blood corpuscles."

Dr. Samuel G. Armor, of Brooklyn, says: "I have seen but few cases of the disease; I believe in all the cases, hemorrhage either preceded or accompanied the membranous expectoration. They were all of the chronic form, and were preceded by catarrhal bronchitis. My general recollection is, that they all finally terminated in pulmonary phthisis.

Dr. Frank Donaldson, of Baltimore, states, that he has only seen one case of plastic bronchitis in this country, and this occurred in the Baltimore Almshouse and Hospital in 1853.

Dr. Henry Gibbons, Sr., of San Francisco, writes: "I have never seen a well-marked case of plastic bronchitis during a practice of fifty years."

Dr. Chas. Denison, of Denver, has never met with, or heard of a case in Colorado.

Dr. G. Baumgarten, of St. Louis, reports the following case in the January number of the *St. Louis Medical and Surgical Journal*, 1869.

"The case occurred several years ago, and it was in the practice of Dr. P. H. Weigel." The patient was "a robust man, in middle life, *potator*, of good constitution, and had been suffering from the affection for about six months. His chief symptom and cause of complaint was the frequent expectoration of the fibrinous bronchial casts in question, which was effected by violent exertions in a fit of the most intense dyspnoea, with livid face and perspiration; relief, however, immediately followed the discharge of the sputum, and there was no dyspnoea in the intervals. At the time Dr. W. first saw the patient, these seizures of cough and dyspnoea, leading to the expulsion of a surprising mass of fibrine, were frequent, often occurring more than once in an hour; the number of specimens presented

to me, more than a dozen larger or smaller arborescent masses (which completely filled an ordinary quinine bottle) are said to have been expelled in one day. The physical exploration of the chest gave negative results. Fever was absent and the general health suffered but little, the patient being about; after a time, emaciation took place, which was attributed however to a temporary withdrawal of the alcoholic stimulus and stricter diet. The disease improved slowly under various plans of treatment, the size of the casts and the frequency of the dyspnœic paroxysms diminished considerably; the patient finally left the city after many months of treatment, benefited, but not entirely relieved. According to later information the case must have lasted not much less than two years, but ultimately got well."

Dr. P. Gervais Robinson, of St. Louis, presented to the St. Louis Medical Society last summer, a cast with the following history, as reported by Dr. Edwards, of Brownsville, Mo.: "Oliver Scott, aged 30, formerly a farmer, at present keeping a restaurant. Mother died in 1868 of hemoptysis; his only sister died at 15, disease unknown; his father is a stout, well-built man, and healthy. The patient has been troubled for twelve years with cough and spitting of blood. Sometimes the sputa would be streaked with blood, at others there would be quite severe hemorrhage. He had slight attacks of asthma prior to 1872, and for the past six years has had chills and fever. Was called in consultation to see him, for the first time, on the night of November 9, 1877; found him bleeding very freely from both the lungs and the nares. The physician in attendance had been giving him large doses of acetate of lead and tannin, applying cold water to his head and neck, and giving him small pieces of ice to swallow at short intervals. Under this treatment he continued to get worse, until he became almost bloodless. Thinking that the cough was probably caused by the blood from his nose running down into his throat, I immediately applied plugs of lint soaked in liq. ferri persulph. to both anterior and posterior nares. This

at once put a stop to the epistaxis, but the hemoptysis continued and became more profuse. I then advised ten grains of gallic acid and half a drachm of fluid extract ergot every hour.

"In about fifteen minutes after taking the first dose, the bleeding was somewhat checked, and, when he raised his head to take the second dose, he was seized with a fit of coughing, and threw out a piece of fibrinous cast. The hemorrhage almost immediately ceased.

"The next morning he commenced spitting blood again, and in about an hour afterwards, he coughed up four other pieces, nearly as large as the first. He has had no hemoptysis since, but the epistaxis continued to trouble him for some time, and I was called to re-insert the plugs on the nights of November 13th and 17th. During the whole time of his sickness (twelve years), the hemorrhage was always worse at night and seldom gave trouble during the daytime.

"The physical signs observed by me at my first visit were diminished resonance, and subcrepitant and sibilant râles in mammary region in front, and over the infra-scapular region behind; at present there is slight increase of resonance all over the chest; a slightly increased elevation of the ribs in breathing, and a slight diminution of chest expansion; he complains of a difficulty in breathing when he exerts himself; I think he probably has a commencing emphysema of the lungs; he tells me that he weighs now 18 lbs. more than he ever did, and feels that his health is getting better in every way."

Further notices and reports of cases will be found in the *St. Louis Medical Journal*, 1869, by Dr. Wilson; *Proceedings New York Pathological Society*, 1877, by Dr. Beverly Robinson; *Transactions New York State Medical Association*, 1866, by Dr. Stephen Rogers; *Transactions State Medical Association of South Carolina*, 1874, Dr. T. Grange Simons; *The Physician and Surgeon*, Ann Arbor, April, 1879, p. 169; as also an article on Plastic Bronchitis in *Flint's Practice of Medicine*.

I have thus been able to note the occurrence of twenty-three cases as reported occurring in this country. Not a large number, truly, but considering the rarity of the disease as given by European writers, and considering the incomplete and unsatisfactory manner in which these statistics have been obtained, it gives us some idea of the rarity and of the symptoms of the disease. The unfortunate habit of many American physicians, of not recording their cases, makes the collection of statistics very unsatisfactory and unreliable. Probably many more cases have occurred besides those noticed, but as we have here the experience of leading physicians, living in different sections, and in centres of population, who would probably hear of or see such cases when occurring, we can consider those recorded as approximating the true number.

In European literature, we find the subject thoroughly investigated by several writers.

The latest and most complete bibliography will be found in an article on Plastic Bronchitis, by Riegel, *Ziemssen's Handbook of the Diseases of the Respiratory Organs*, p. 165.

Biermer, in *Virchow's Handbuch der Pathologie und Therapie*, has collected fifty-eight cases, with a thorough investigation of the subject.

Lebert, in his book, *Klinik der Brustkrankheiten*, and and in a monograph in the *Deutsches Archiv.f. Klin. Medicin*, vol vi., has still further extended the number.

Dr. T. B. Peacock, in the *Transactions of the London Pathological Society*, and in the *Medical Times and Gazette*, 1854 (reprinted in the *American Journal of Medical Sciences*, 1855), notices thirty-four cases, some of them taken from German authorities.

A report of two cases, with a full account of the disease, will be found in Watson's Lectures, and the disease is considered in several of the text-books on general medicine.

The latest report on plastic bronchitis will be found in *Schmidt's Jahrbuch*, vol. 163, p. 28) 1874. Kretschy reports ten cases in addition to those collected by Biermer (1867)

three of which are acute, and seven chronic. To which may be added four cases of Chevstok (*idem*, vol. 173, p. 136).

Plastic bronchitis, croupous bronchitis, or bronchial polypus, as it has been variously termed, is an inflammation of the bronchial mucous membrane, characterized by a fibrinous exudation. It may occur in the bronchi, in connection with a similar exudation in the larynx and trachea; it may develop by continuity from croupous pneumonia, or it may occur primarily, and be limited to the bronchi. Plastic bronchitis is the term properly given to this last class of cases, where the exudation occurs in the bronchi, without a similar condition existing either in the laryngo-trachea or in the alveolæ.

The number of cases recorded has been comparatively few. Biermer (1867), after a most exhaustive study of European records, could only find 58 cases, to which may be added 41 cases noticed by Peacock, which probably include many already reported by German authorities. Lebert has found 34 cases in which the histories are so imperfect as to render the exact nature of the disease doubtful. To these we may add the 10 cases reported by Kretschy (1874), and the 4 cases of Chevstok, making in all, in German reports, 72 reliable cases.

The disease occurs more frequently in males than females. According to Biermer the ratio is 3 : 1; whilst Lebert gives it 3 : 2. Peacock also finds it more frequent in the male sex.

The earliest age at which it has been observed is four years (Simons, Charleston, S. C.), the oldest, seventy-two (Goumœns), Wunderlich and Murdock have each reported cases of eight years, and Biermer one of five. Most frequently it is found between puberty and the fiftieth year; only four cases have been observed beyond the fiftieth year. It is said to occur most frequently in the late spring, about the time when pneumonia is most prevalent.

Menstruation and pregnancy have a seeming influence upon it. Schnitzler gives a case where the attacks coincided with menstruation, and mentions several occurring

during pregnancy. But this may be a mere coincidence. Oppolzer mentions a case which came on monthly at the time of the catamenia, whenever this was absent. The etiology of the disease is very obscure. In the majority of cases, it seems to have arisen from exposure as in ordinary bronchitis. In a certain number of cases, the tubercular or scrofulous diathesis has been present, but in far the largest number, the persons attacked seemed to have been in previous good health.

Biermer is inclined to believe that tubercle and scrofula bear the same relation to the disease as will be found in any other debilitating influence, and states emphatically in contradiction to the views of Rollett, that there is no more connection between plastic bronchitis and phthisis, than between it and ordinary bronchitis. Hemorrhages, and the occurrence of effused fibrinous bronchial plugs in phthisical cases, as is shown in the two cases cited by Dr. Flint, may have caused the seeming connection between the two diseases.

The view of Stokes, that the lining membrane of the bronchi loses the mucous and partakes more of the serous character as it approaches the periphery of the lungs, is denied by Peacock, who "can only assume that the exudation depends on a specific character of inflammation resulting from some peculiarity of the individual."

The casts when ejected are of a pearly white color, unless discolored by blood; the larger portion hollow and filled with air and mucus; the smaller branches are solid and subdivide until forming fine threads. The cast is formed of a series of concentric layers of fibrine; it is nearly cylindrical, giving a mould of the bronchial tree and its ramifications, and is of considerable toughness and firmness. The tubes in which it is most generally found are those of the third and fourth size. The casts with shorter branches are said to come from the upper part of the lungs. Microscopically they consist essentially of fibrine, containing occasionally products of inflammation.

Plastic bronchitis occurs in an acute and in a chronic

form; the acute type is very rare: Lebert has only been able to find seventeen cases reported. The duration of the disease in fatal cases, which comprises one-half of all (Biermer), is between three and fourteen days. The disease commences as a rule with the symptoms of simple bronchial catarrh; after a few days a sense of heaviness over the chest is experienced, and a chill followed by high fever comes on; the cough becomes violent and occurs in repeated paroxysms, the fever increases, and dyspnœa becomes intensified until the patient experiences a sense of intense suffocation. Portions of membrane mixed with catarrhal sputa are expectorated with great effort, until at last the cast is thrown off, when there is a comparative relief from all symptoms, at least for the time being. In fatal cases there is a continuation and constant aggravation of symptoms until at last the patient becomes somnolent, ceases to expectorate the casts, and, soon becoming unconscious, dies.

At times the disease simulates a pneumonia, with the usual chill, and pain in the side. The casts may even be wanting in the expectoration, and in one case mentioned by Biermer there was no cough, probably due to inability. Dyspnœa is a constant symptom, and the fever has been absent in only one case reported (Caspar). The physical signs present are greater or less suppression of the respiratory murmur over the affected bronchi. Sub-crepitant, and occasionally sibilant râles are heard when the cast has become loosened. M. Valleix mentions a peculiar clicking valvular sound, the "*petite bruit de soupape*," which has also been noticed by Cazeaux, Barth, Girondet, and Gordon, as being occasionally heard over the affected part.

Percussion sound is generally negative. A typical illustration of the acute form of the disease will be found in the case of Ruck (*The Physician and Surgeon*): "A woman fifty-seven years old, of previous good health, and healthy parents, suffered for two preceding years from occasional cough and shortness of breath upon exertion, constipated bowels and diminished appetite. Upon taking cold, she had rather a severe chill followed by fever, a feeling of lassitude

and weakness, thirst, increased cough and dyspnœa. The patient became weak very rapidly, the cough assuming a violent and paroxysmal form, with sense of great dyspnœa. A short time before death, during such paroxysms, which were accompanied by loud mucous râles, the patient expectorated three mucous balls, after each of which she experienced temporary relief.

“Professor Chevstok, now called in consultation, found the patient extremely weak and sinking rapidly, the voice, however, not hoarse, and the cough without croupous tone, the jugular veins moderately distended. The chest appeared moderately broad, long, slightly arched; respiration increased in frequency, and motion on the left side diminished; the intercostal spaces contracting much less during inspiration than on the right side. Percussion showed normal lung sound. No respiratory sound over the whole of the left lung except toward the root, where bronchial breathing was heard; on the right side the respiration was exaggerated; the pulse was small and weak, 104. The sputa continued—mostly of mucus, and three moderately solid balls, about one and a-half to two centimetres in diameter, apparently of grayish-white mucus, which when disentangled presented the characteristic tree-like appearance of the bronchi. The patient continued to sink rapidly, did not vomit nor expectorate any more casts, became somnolent, unconscious, and died on the second day.”

Also the following case of Kretschy, *Wiener. Med. Wochenschrift*, xxiii., 1873.

The patient was a young man who had had a hacking cough for three weeks, otherwise entirely well. Suddenly he had a chill followed in one and a half hours by fever, with great dyspnœa and violent attacks of coughing. The next morning after a most intense feeling of suffocation, a reddish fleshy mass was ejected. His breathing became at once free, a slight hacking cough remained, with a slight increase in temperature, languor, and a pain in his head.

Three days afterwards he was examined by Prof. Duchek.

His respiration was quiet, and he had slight catarrhal fever and slight cough. There was no dulness on percussion. On auscultation, a few mucous râles were heard posteriorly over right lung. In the course of the morning, a violent attack of suffocation and cough came on suddenly, and continued until patient had expectorated a reddish mass, which, when spread in water, showed a complete cast of the bronchus; it was eleven centimetres long.

5th day. No fever in the morning; in the afternoon he had again a chill followed by fever, when another cast was expectorated with the previous symptoms.

9th, 10th, 11th days. High fever with intense dyspnœa, moist râles numerous over right lung; after an emetic, two casts were expectorated. Died on 16th day.

At the autopsy, the trachea, and bronchi were found injected and filled with mucus. A fibrinous cast occupied the middle and lower portion of the right bronchus. The left lower lobe, as also the portion of upper lobe contiguous to it, as well as the posterior part of the right lung, were empty of air and infiltrated with bloody serum. The lower bronchial tubes of the right lung were partly filled with a yellow fluid and partly with fibrinous mucus.

In the chronic form of the disease there are no constant and definite symptoms. It may present, in the beginning, symptoms similar to those found in the acute form; these, however, subside after the ejection of the cast; a periodic expectoration of bits of casts, together with occasional spells of dyspnœa, may be afterwards the only apparent symptoms. As a rule, however, the chronic form commences with the ordinary symptoms of a mild bronchitis, which is sooner or later accompanied by the expectoration of fibrinous pieces. The general health of the patient is little changed; there is usually no fever; dyspnœa is occasionally apparent, previous to the expectoration of the casts, which occurs at greater or less intervals. This condition may continue for years. Walshe observed a case in which the disease continued with intermissions for fourteen years. Nichols reports in his case that pieces of casts were expectorated.

torated daily for seven years, after which the patient recovered.

Hemorrhage occurred in about a third of the cases noted. (Biermer.) At times it precedes the expectoration of casts, at times accompanies it; it may be slight, and again in other cases, it may be very profuse.

The diagnosis of plastic bronchitis rests entirely on the presence of casts in the expectoration; a discrimination between this and laryngeal croup will be easy, from the presence or absence of laryngeal symptoms. The only cases which may give room for doubt are those of croupous pneumonia, in which small particles of fibrinous pieces are ejected; and cases of bronchial hemorrhage in which moulds of the tubes are formed from the fibrine of the effused blood.

Biermer gives the differential diagnosis between these two conditions as follows: the moulds of the different ramifications are never so perfect in the fibrinous plugs as in the plastic casts; in color they are not so pearly white, and are less homogeneous; they are different in form and structure, the casts being formed of laminated concentric layers. In the plugs the blood is intimately mixed with the fibrine, whilst in the casts it is superficial and may be wiped off. The prognosis of chronic plastic bronchitis is generally favorable. In persons of a tubercular diathesis it may be the provoking cause of the disease. The record shows that few of the whole number of cases have developed into pulmonary phthisis. Emphysema is a much more common sequence.

Oppolzer relates a fatal case where the patient died from a lodgment of a large cast in the glottis.

In the treatment of plastic bronchitis, attention must be given to two points: to promote the expectoration of the membrane, and to prevent its recurrence. To accomplish the first, inhalations of lime-water (Wunderlich), bicarbonate of soda, and lactic acid are indicated. When the casts are loosening, an emetic, or the hypodermic injection of apomorphia, has given good results. (Riegel.)

The remedy that has been most generally recommended is the iodide of potassium (Wunderlich, Thierfelder, Sklarek.) It is claimed to have the property of loosening and disintegrating the exudation.

The mercurials are strongly advised by Biermer, Peacock, Thierfelder, and other writers. Counter-irritation is recommended; a blister certainly accomplished good results in the case reported by Prof. Stillé. To prevent the reformation of the exudation, remedies that seem to have an influence on the mucous membrane should be used; theoretically cubebs and the balsams are indicated; iodide of potassium and muriate of ammonia have been highly recommended. In my own case, I believe, the good results attained, were due to the inhalation of tar and carbolic acid; the softened condition of the later casts, and especially the disintegration of the finer filaments, would seem to prove this. The strength of the patient should be built up with tonics, and when phthisis is threatening, cod-liver oil and arsenic are indicated. The removal of the patient to the pure air of the country, from the dust and smoke-laden atmosphere of towns, will be a prime necessity, and the rules of hygiene in relation to climate, habitation and clothing must be strictly applied.

The following additional notices of cases have been received since the report was written:

Dr. Geo. J. Engelmann, of St. Louis, gives the following history of a case:

"The only case of plastic bronchitis which has come under my observation, was one in which the disease complicated a rapidly developing ovarian carcinoma; hence the symptoms are not characteristic or well marked.

I saw the patient in consultation with her attending physician, Dr. H. Greiner, a few days after she had been first confined to her bed by the severity of the abdominal pain and the intense neuralgic headache. The patient was a multipara, 25 years of age, without any attainable history of cancer or of phthisis; her face was pale and edematous, although she was free from edema in all

other parts; pulse, 120-130; skin moist; temperature scarcely above normal; had an abrupt (hacking), bronchial cough, with a very moderate expectoration of clear mucus; slight dullness in the apex of the left lung, where percussion caused pain; percussion revealed no changes in the right lung, although the respiration was somewhat impeded, indistinct, with occasional râles.

The voice was husky and faint as if there was some narrowing in the passages, and with difficulty could she make herself understood.

Opium, quinine and stimulants were given.

All the symptoms grew more alarming, as the abdominal growth speedily increased in size; the edema of the face, however, disappeared.

The patient was failing; profuse diarrhea for a few days.

Ten days after I first saw her, and ten days before her death, the symptoms of plastic bronchitis, the copious expectoration of thick membranous casts of the smaller bronchi, first appeared; upon that day she felt a much greater oppression, was almost suffocating, until with considerable effort, a number of such casts were coughed up. This brought relief; and as the patient herself expressed it, she felt "as if the hole was open again."

This condition continued for eight days, about a tea-cup-full of these casts being expectorated every twenty-four hours; all appeared to come from the same place, or at least from similar sized bronchioli; they were about 3 inches long, with four or five ramifications, $\frac{3}{16}$ inch in diameter at the upper end.

Two days before her death, vomiting and diarrhea set in, and expectoration ceased; breathing was labored and rapid, no respiratory sounds heard over the right lung, from which the casts had come, as shown by the marked difference in respiration over the right lung before and after the expectoration of the croupous masses.

Upon the left side, the respiration was increased, puerile.

Failed steadily; the post-mortem examination revealed

a large ovarian cancer with metastatic deposits in the kidney and gall bladder. Lung not examined, as only a very hasty examination was permitted.

The rapid and enormous formation of the fibrinous casts in this case I attribute to the greatly altered condition of the blood in consequence of the existing diathesis."

Dr. Norton Folsom, of Cambridge, Mass., writes an account of his own case :

"I am accustomed, once a year or so, to have an attack of "cold" and cough. The expectoration is usually in dense masses—yellowish white. A few years ago, my cold hung on, and, in the course of the the third week, I raised several bronchial sputa, $\frac{3}{4}$ to 2 inches in entire length, like white, firm mucous, not tubular, but looking as if they had lain along the sides of the smaller tubes."

Dr. W. T. Whitney, in charge of the Warren Anatomical Museum, Boston, Mass., reports four cases in the museum, giving short notes of each case (these cases are probably already mentioned by Dr. R. H. Fitz).

No. 2,122. Bronchial polypi, raised in large numbers by a man 30 years of age, before his death from phthisis and during a period of six weeks. The casts are from the larger and smaller bronchi, and some are between one and two lines in diameter and over two inches in length. 1868—[Dr. H. I. Bowditch.

No. 4,351. Bronchial polypi.—Several specimens, one to two inches in length, branched as usual. From a man aged 65, after an attack of pneumonia, in March, 1875. On the seventh day, the cast was expectorated after a very violent paroxysm of coughing, threatening suffocation. Died three days afterwards.—[Dr. J. P. Haywood, Deadham.

No. 4,784. Fibrinous cast expectorated from bronchi.—The specimen is four inches long and very arborescent. Patient, a healthy girl 11 years old. In August, 1876, without exposure, a severe, dry, shrill, harsh cough came on with moderate fever. Expectoration, at first slight and catarrhal, but bronchial casts soon appeared and have continued ever since, excepting about four weeks in

September and October. Usually thrown up at night or early in the morning by gaping or hawking, they are rarely tinged with blood. Voice little affected; pain and dyspnea slight. Since March 1st, has had acute bronchitis, owing to exposure, with mucous and bloody expectoration but no casts. On the 26th the acute symptoms subsided and the casts reappeared—case occurred in State of New York in 1877.”—[Dr. Ira E. Chase, Haverhill, Mass.

No. 4,893.—A case reported in *Boston Medical and Surgical Journal*, Vol. 98, p. 108.

An additional case must be noted as occurring in the practice of Dr. F. W. Wesseler, of St. Louis, the details of which are however wanting.

With these additions, I am able to report twenty-six cases as occurring in this country, not counting the four cases of Dr. Whitney, which are probably the same cases reported by Dr. Fitz, of Harvard College. See page 114..

RAILWAY SANITATION AND QUARANTINE.

BY GEORGE HOMAN, M. D., *Chief Sanitary Officer to the City of St. Louis.*

[Read before the Beaumont Medical Club, Dec. 18th, 1879.]

Gentlemen: Having been honored by receiving an invitation from the president of the club, to present to the members some account of the proceedings had at the seventh annual meeting of the American Public Health Association, held in Nashville, I have thought that it might be not uninteresting to select, out of the many subjects presented and discussed on that occasion, the one of Railway Sanitation and Quarantine and matters connected therewith, for some consideration this evening.

A conference between railway managers and health authorities was held November 19th, at which were present

representatives of seven lines of railroad and a large number of medical men and sanitarians.

At this conference, the disastrous effect of yellow fever epidemics on railroad travel, traffic and prosperity, was fully presented, with a statement of the relation of lines of railway to the general public during the existence or operation of national, state or local quarantine measures. The embarrassment, inconvenience and loss inflicted on southern lines of travel during the two past seasons, by the action of individuals and communities, while laboring under the influence of panic, fright, or even well-grounded fear, was something enormous. The actual money loss of one road—the Louisville and Nashville and Great Southern—independent of contingent or constructive losses, was stated by the general manager to have been \$350,000. Each and every community that deemed itself liable to possible infection adopted such quarantine measures as seemed to suit best its own interest, while the good of the whole was entirely forgotten. Every consideration, save that of selfish interest, was ignored in a blind, unreasoning, and often futile attempt at self-protection. All the hardships and inhumanities attendant on the enforcement of the so-called shot-gun quarantine, were precipitately invoked, often on the strength of a rumor, a groundless apprehension, or a mere suspicion of infection by people whose intelligence and reason seemed at times to be paralyzed by fright. As an illustration of the embarrassment and annoyance to which southern roads were subjected during the epidemic of the past summer, the general manager of the Chicago, St. Louis and New Orleans road, stated that his trains had been compelled to pass through forty-nine quarantines within a distance of 550 miles.

The necessity of devising measures by the adoption of which such serious interference with trade and travel could be avoided, was recognized by all, and it was the feeling of those present, that the right and authority to declare and enforce quarantine should reside solely with some central power, and that in the interests of the general good, local

bodies should be deprived of the power to thus needlessly interrupt commerce and travel ; and the further necessity was recognized, of said central power modifying and harmonizing all conflicting regulations, as, at present, scarcely any two places have similar sanitary or quarantine codes.

The good health of the people was recognized as meaning prosperity to the roads, and accordingly it was to the interest of railroad managers to do everything in their power to promote the same, and therefore they stood ready to coöperate in all measures tending to that end ; but they desired to know if the quarantine system could not be made uniform, and if one quarantine under proper and competent authority would not suffice for all, so that interruptions to commerce from such cause, would be as few as possible, compatible with a due regard for the public health and safety.

A memorial was offered by the railway officials having this general object in view, which contained the following resolutions :

“Resolved, That the representatives of the several railroads, assembled in convention, do most respectfully petition the Congress of the United States, to charge the National Board of Health with the sole power of making and carrying into effect such rules and regulations as to them shall be deemed wise and proper, to govern inter-state commerce affecting the transportation of passengers and merchandise on railroads and on steamboats or other craft plying on lakes and rivers between and through states or territories, where any contagious or infectious disease does or may exist. The memorial further asks that the President of the National Board of Health, the Surgeon-General of the United States and the President of the State Board of Health, or the members of the National Board of Health from the state where such disease exists, should constitute an executive committee with power to act and put in force quarantine rules and regulations for governing the transportation of passengers and merchandise.”

It was further expressed in the memorial, that no clashing

between national and state authority should be allowed to prejudice by delays, such great objects as the public health and the material prosperity of the country; that whenever said National Board of Health deems it necessary to put such quarantine regulations into force, it shall designate what class of merchandise (if any) may be transported * * * * and that it shall designate stations or points upon such railways, rivers and lakes, as it shall consider necessary for conducting an effective system of inspection of such passengers or merchandise, and make such provision for caring for sick persons as the interests of the general health and safety shall require.

The memorial concludes with a request that Congress appropriate a suitable sum to carry out the measures indicated, and expresses the belief that such expenditures as are involved in making and executing the same, will not be objected to by good citizens and tax-payers, and that it will not be a burden seriously felt by the national treasury. After some discussion, the memorial was referred to a committee, to report thereon at a meeting to be held the following day.

The convention re-assembled pursuant to adjournment, and after some discussion, the following resolution was unanimously adopted:

Resolved, That a committee be appointed, to consist of one representative from each State Board of Health, and from each common carrier company represented in this convention, whose duty shall be, by petition or memorial, to bring to the attention of the legislatures of the states, the practical defects of the present system of quarantine, in order that a more effective system may be adopted and enforced by appropriate legislation, and to ask through the various state legislatures an appropriation from Congress for the enforcement of quarantine, to be expended under the approval of the National Board of Health.

It will be observed that there is a material difference between the wording of the memorial and that of the above resolution. After due consideration and discussion, it was

deemed best to thus change it, and that aid should be asked of Congress through the representatives of the people in the various state legislatures, rather than by the direct appeal of the members of the convention, as was contemplated in the memorial presented the day before. The former course would prevent any feeling in the public mind, that the railroad corporations were seeking protection or favors of the General government in a manner possibly prejudicial to the public interests; and if this hostile feeling had already been awakened by a misconstruction of motives, the course resolved upon would serve to disarm and allay it, as all the aid sought or desired, would have to be obtained through the efforts of the chosen representatives of the people themselves. A feeling of latent hostility toward railroad corporations seems to exist in some parts of the south, although its expression is less likely to be evoked, when the promotion of sanitary measures of a practical nature for the benefit of the roads, is proposed, and which are of course more or less directly in the interests of the people themselves. In the course of the discussion the question as to whether or not the enforcement of inland quarantine by national authority would be an infringement of a states rights in sanitary matters was not infrequently touched upon, but almost invariably with expressions by the speakers of the right and duty of a strong central power interfering promptly and efficiently to protect the public health when threatened by an epidemic. This power seems to be fully conferred in the clause of the constitution which says,—“The Congress shall have power to regulate commerce with foreign nations and with the several states.”

The general sentiment was unmistakably in favor of waiving any reserved rights of the states in this respect, and of the exercise of this power by the national government, in the “permanent establishment of a National Board of Health, and its maintenance with all the powers necessary to effect the preservation and promotion of the general public health by quarantine and any and all means that said Board may think necessary.

The prevalence of yellow fever in the south, during the two past summers, with the attendant railway complications and inconveniences, largely due to the self-assumed sovereign right of every community to declare and enforce quarantine—a quarantine that was too often utterly unreasonable, and in disregard of the claims and sentiments of humanity, not to speak of the rights of common carriers—has forced this matter very closely on the attention of those interested in the lines of railroad which traverse the southern country. Such obstructions to railway transit of course more or less directly affect and derange the business of the entire country; and the possibility of the transportation and spread of the infecting principle of yellow fever, or other epidemic disease, in railroad cars, has suggested the necessity of a sanitary supervision of railroads, and of travel and traffic by railroad, not only in time of epidemics but regularly and systematically, as an essential part of railway management and equipment, and of the allotted work of duly qualified railway employés.

This subject received attention at a meeting of health authorities at Atlanta, in May last; and a proposition relating thereto was discussed and adopted. It contemplates the thorough and systematic daily inspection, by competent persons, of depots, stations, round-houses, car-shops, grounds, etc., to the end that no lodging place for disease may be maintained in such buildings or on such premises. Another proposition, relating to railroad quarantine, was also adopted, which specifies the distance from an infected place, and the manner in which transfers of passengers and baggage from a train from an infected district should be accomplished. It also suggests the sanitary management and regulation, by competent authority, of sleeping cars and passenger coaches, and the purification, fumigation, etc., of coaches, bedding, upholstery, and similar car furnishings.

The subject of the transportation of freight was also considered, and the sanitary restrictions under which such transportation could be most successfully accomplished, were indicated together with the measures best adapted to secure thorough ventilation of the cars while in transit.

It will be thus seen that the subject of railway quarantine and the sanitary management of railroads is deemed an important one in every respect, and deserving the attentive consideration not only of railroad men but of the general public as well.

The repeated occurrence of yellow fever in the south, has given this subject special prominence in that section of the country, and has suggested the need of railway regulation by an impartial and competent authority. Where inter-State commerce, either north or south, is widely threatened by the prevalence of epidemics, the enforcement of quarantine measures and, consequently, the accomplishment of the greatest good to the greatest number, could be best secured, probably, by the agents of the general government; but the need of the exercise of such authority and power would be exceptional were the sanitary details of railroad management committed to the care of medical officers, and this service fully identified with the interests of the road on which it was maintained. The establishment of a medical service, ample enough to cover all the details of railroad management where scientific knowledge and skill could avail to prevent sickness or save life, would be an invaluable addition to the working-force of such corporations.

In view of the rapid extension of the railway systems of the south and west, together with the present marked tendency toward consolidation and unification of the interests of different lines of road, the inquiry naturally arises whether the purely business interest of such systems will not render the establishment of a railway medical service a necessity, aside from any advantage that would accrue to the public from such an arrangement. These corporations, with their well-organized systems of management, could administer such a service much more effectually than could be done by either state or national authority.

The creation and maintenance of a medical and sanitary bureau, in connection with their management, on all trunk lines of road, will, in the near future, be recognized as a necessity by their directories, not alone to subserve their

own interests, but to enable them to keep pace with the requirements of an enlightened public in this direction; and the establishment of such a service would be a practical solution of the problems discussed at the meetings to which reference has been made.

As immunity from the occurrence of malignant epidemics, even in the north, cannot as yet be guaranteed, the possession of such a service by railroads would afford them an important advantage in meeting promptly such emergencies; and state aid would only be needed, probably, to supplement its workings, instead of having to initiate it; and such a service would come well into play also in the event of the occurrence of animal epidemics on lines of road where the transportation of live stock is an important part of the business.

The sense of the Nashville conference was, that either the state or the general government should provide for, and undertake the work of regulating railroads in this respect; while the result of the deliberations at Atlanta was an expression of belief that such service should be administered by local or municipal authority. The former course, to me, seems unnecessary; while the latter would be impracticable, would be ineffective, and would prove unsatisfactory in its results, both to the railroads and to the public. It is my belief that the wisest course in regard to this matter, would be the middle one, viz.: That the railroad companies themselves assume the work of organizing such a service, and of carrying it into practical effect. If properly administered, it could not fail of affording the most satisfactory results, and the roads would in this way become most effective, though volunteer adjuncts in the development and administration of state medicine.

The attention that has been directed of late to the subject of the relation of railroads to the public during the existence of epidemics, with the discussion and agitation resulting therefrom, has already been productive of good, and progress has been made toward a full solution and understanding of the questions involved therein.

CASES FROM PRACTICE.

CASE OF ABSCESS OF THE LIVER AND ULCERATION OF THE LARGE INTESTINE—WITH COMMENTS.

Paper read at meeting of District Medical Society, Kansas City, Mo.

BY J. H. VAN EMAN, M. D., KANSAS CITY, MO.

Adam L., æt. 51 years, 5 months; married, a native of Prussia, below medium size and sparely built; occupation, stone-mason; was brought to the Sisters' Hospital Oct. 6, 1879. Has been a hard drinker; three weeks since had a severe chill, with intense pain in right side and a very troublesome diarrhea.

On admission, did not complain of anything but the diarrhea and pain; pulse 85, temp. 101°, respiration 20, and somewhat restrained, on account of full breathing increasing the pain. Skin, a peculiar, muddy bronze color, neither moist nor dry, conjunctiva clear, tongue red and glazed, dry and hard. No complaint of headache or other nervous symptoms. Physical examination of the thorax disclosed no morbid condition. Percussion over right hypochondriac region developed very great tenderness, marked tenderness and gurgling in the ileo-cæcal region and all along the course of the ascending colon, and some in the region of the sigmoid flexure; little or no tenderness over transverse colon. No tympanitis. Stools quite frequent, generally small, offensive, containing some fecal matter of the normal color, very largely muco-purulent, but not bloody. He had no vomiting or gastric trouble during his whole illness, and his temperature was usually 100°. Diagnosis, ulceration of large intestine with serious hepatic trouble and, in all probability, an hepatic abscess.

R.	Terebinthinæ Spts.	3vi.
	Opii Tinct.	3vii.
	Quiniæ Sulph.	3i.
	Mucil. Acaciæ	3ij.
	Syr. Simplex ad.	3iv.

M. Sig. One teaspoonful once in two hours.

Diet, lime water and milk, one part to three. During the last two days of his life he was kept fully under the influence of opium. In addition to the above treatment he was given several hypodermic injections of $\frac{1}{4}$ grain morphine at night to give rest; and a fly blister 3x3 inches was applied over the most tender portion of right hypochondrium.

Thirty-six hours before his death there was a sudden change for the worse. The pulse was quick and lacked force; skin clammy, hiccough, intense tympanitis, and evidences of perforation, general peritonitis and the near approach of death, which occurred October 14.

Autopsy, 12 hours after death. Rigor mortis well marked, body much emaciated, little fat in abdominal walls. Brain, heart and lungs not examined.

On opening the abdominal cavity we found general recent adhesions and sero-purulent fluid. In right inguinal and lumbar regions, the intestines, (particularly the colon), were adherent to the abdominal wall; the adhesions were so soft that they were broken up by simply lifting away the abdominal wall, when a perforation of the anterior wall of the colon, about one inch above the ileo-cæcal valve became manifest. This perforation was the size of a crow-quill, and the contents of the intestine welled up from it on the slightest movement. At this point the inflammation had evidently been most intense, and longest in existence. The liver was slightly enlarged, very dark in color, and adherent to the diaphragm and abdominal wall by very fragile inflammatory adhesions. Passing my hand backward over the right lobe, I found the liver quite soft; and while endeavoring to remove the gland from the body, the outer wall of an abscess as large as a cocoanut, was broken through, and the purulent contents escaped into the abdominal cavity. There was no appearance of bile, and no offensive smell. The line of demarcation between the abscess and the comparatively healthy liver tissue was well marked. There was no appearance of a fibrous capsule, the inner surface of the abscess wall being ragged, broken-down liver tissue. No evidences of any secondary abscesses. The gall-bladder was moderately full, the surrounding tissues being discolored by transuded bile. The kidneys gave some little evidence of fatty degeneration. Within both suprarenal capsules, were hard, calcareous formations. The spleen was slightly below the average size, blue-black in

color, friable and easily broken down. The ileum was free from lesions of any kind, except a condition of moderate hyperemia. The cœcum and the whole of the colon were full of ulcers, and the walls were thickened. The least number of ulcers existed in the transverse colon. These ulcers varied in size from a mere point to the size of a silver dime. Some of them merely penetrated the mucous membrane, others had destroyed everything, down to the serous covering of the gut.

One ulcer had resulted in perforation previous to death; three or four broke down during the removal of the gut. No cicatricial tissue was found in any portion of the gut, and no enlargement of the lymphatic glands. The mesentery was soft and easily torn.

Some valuable points in this man's history I was not able to obtain. The bronze color of his skin, suggested Addison's disease; but he stated that he had always been of that complexion. His wife, who came a few hours before he died, said that he had been of that color ever since she had known him. He gave no account of any previous sickness, and was not willing to admit that he was intemperate. He had lived for years in St. Louis, and I have no knowledge of his having resided in a tropical climate.

The calcareous formations in the supra-renal capsules, indicate the possibility that his bronze color was the result of disease of the suprarenal capsules in early life. Abscess of the liver, at least the variety found here is, in our latitude, a rather rare disease. Frerichs groups all suppurative inflammations of the liver under the general head of "circumscribed inflammation of the liver." Murchison divides abscesses of the liver into two classes, pyæmic and tropical. Frerichs gives as causes of suppurative inflammation of the liver, "(a) contusion by traumatic agency; (b) metastasis or pyæmia; (c) inflammatory or ulcerative processes in the gastro-intestinal canal; (d) inflammation and ulceration of the bile ducts."

Pyæmic abscesses are multiple, small in size, and are caused by emboli in the hepatic capillaries. These emboli have their origin in some more or less remote portion of the body where a lesion of an inflammatory type, has resulted in the formation of coagula in the veins or the introduction of pus corpuscles into the blood, by the opening of an abscess directly into a vein. This is said by some authors to be more frequently the result in

injuries of the head than in injury or disease of any other part. It is a clinical fact that abscess of the liver frequently follows diseases and injuries of the bones. Pyæmic abscess may also arise from ulceration of any portion of the alimentary canal, from phlebitis of the portal vein or of any of the mesenteric veins.

For emboli in the liver, the result of intestinal ulceration and inflammation, from phlebitis of any of the mesenteric or hemorrhoidal veins, from accidents to or operations upon the rectum, we need be at no loss to account; but for hepatic emboli, the result of disease of the leg, or still more so of the head and upper extremities, we cannot so easily account. Magendie, Meckel, and others, suppose the purulent deposits in the liver are the results of an occlusion of the hepatic veins, produced by the backward passage of thrombi from the vena cava (*Freich's Disease of the Liver*, vol. ii, page 131.)

Another supposition is that the capillaries of the liver are smaller than those of the lungs and general system, and that these emboli, after entering the general circulation, pass through the lung and systemic capillaries, but such as are carried to the liver by the hepatic artery, are arrested in the capillaries and thus set up secondary pyæmic abscesses. This is also very conjectural. It is true, to a greater or less extent, that when we find so-called pyæmic abscesses in the liver, we find the same condition in many other portions of the body, showing that the condition is one of general blood poisoning, and not a local lesion. The prognosis in this variety of abscess could not well be worse.

The pathology of the variety of abscess found in this case, *i. e.*, tropical or idiopathic abscess, is as yet *sub judice*; "some, like Annesley, maintaining that the dysentery is the result of the hepatitis, others that the hepatitis is the result of the dysentery, while a third class, like Abercrombie, have suggested that the frequent concurrence of the two maladies is merely the result of accident." (*Murchison, Diseases of Liver*, page 178). Dr. Budd's theory is that the suppurative inflammation of the liver is a result of purulent absorption from the ulcerated colon.

This doctrine is said to be most generally accepted. There are, however, some strong reasons for not accepting Dr. Budd's views, but rather that which makes idiopathic or tropical ab-

abscess of the liver and ulceration of the intestine when occurring in the same subject, not a cause and effect, but either the result of a *common* cause, or a *concurrence* of *causes* which individually will only produce one of these diseases. This I understand to be Murchison's position.

Out of 490 cases of abscess of the liver which I have collected from various sources, 149 had intestinal ulceration, or a little over 32 per cent. More than two thirds of these cases, therefore did not arise from intestinal irritation.

The following statistics are collated from the "*Medical History of the Rebellion*," vol. ii :

In 156 fatal cases of inflammation of the intestines without ulceration, there was one case of hepatic abscess. Two large, multilocular abscesses were found in this case. In 115 cases of diphtheritic dysentery, there were seven abscesses of the liver—three single and four multiple. In 396 other fatal cases of diarrhea or dysentery, there were six single, and ten multiple abscesses. In a total of 667 cases tabulated, we have 511 cases of ulceration of the intestine, with 23 hepatic abscesses, and 156 cases of intestinal disease without ulceration, and one (large) abscess.

Statistics from reports in Europe give 473 cases of dysentery with 13 hepatic abscesses. French surgeons in Algeria report 1001 cases of dysentery, with 180 cases of hepatic abscess. Various observers in India give a total of 1,844 cases of dysentery, with 376 cases of abscess of the liver.

The co-existence of hepatic abscess and dysentery in the United States occurs in 3.5 per cent. of the cases of intestinal inflammation, and in 2.7 per cent. in Europe. In India and Algeria, 19.2 per cent. of fatal cases of dysentery had also an abscess of the liver. This, if it shows nothing more, proves that there is some other cause for hepatic abscess in addition to intestinal ulceration.

Recapitulating and condensing statistics, we have :

Total cases dysentery and intestinal trouble.....	4,134
“ “ abscess of liver.....	1,083
“ “ dysentery without abscess.....	3,392
“ “ abscess of liver without dysentery.....	341

These figures show that while these two pathological lesions very frequently co-exist, there is a very large number of cases in which only one of them is found, and, to my mind, effectually

disproves that either, as a rule, stands in a causative relation to the other. Multiple hepatic abscess frequently results from intestinal disease, as it does from diseases in many other portions of the body. The variety of hepatic abscess called by Murchison tropical, and by others idiopathic, is frequently found in coexistence with dysentery, but there is very great doubt whether they bear any but an accidental relation to each other. In the case whose history I have given, I believe that the abscess of the liver was a complication of the intestinal ulceration, and dated from the time of the chill; that, in spite of negative history, the intestinal ulceration was of much longer standing; that there was no relation of cause and effect between the two lesions; that the man's death was caused by general peritonitis, the result of intestinal perforation; that, had he lived much longer, there would have been an escape of the contents of the abscess into the cavity of the abdomen; and lastly, that in such cases, any treatment is utterly futile.

Kansas City, December 4, 1879.

TRANSLATIONS.

TABES DORSALIS, THE STRETCHING OF LARGE NERVE TRUNKS
IN ITS TREATMENT.

(DR. CARL LANGENBACH, *Lazarus Hospital, Berlin.*)

K——, 40 years old; tradesman. Patient, several months ago, fell sick with symptoms of tabes dorsalis; applied, Aug. 11, 1879, for admission into the hospital.

Symptoms: Complete ataxia with intense, darting pains in the extremities; typical disturbances of sensation, especially in lower extremities; patient, in walking, flings off his slippers without being conscious of it; he does not recognize the nature of what he treads upon, plantar anæsthesia; occasionally the feeling of constriction about the middle; reflex irritability somewhat increased; marked myosis and hyperæsthesia, especially on the anterior surface of thighs; all these innervation disturbances present also in the arms, but to a much less degree.

The pains caused excessive suffering and resisted all anodynes. As the left ischiatic nerve seemed to be particularly painful, I proposed to stretch it after the usual method. Sept. 13, operation performed; under anæsthesia, the nerve was exposed, and thoroughly stretched; it was congested and somewhat swollen. Wound stitched and antiseptic applications. Upon return to consciousness patient declared there was a complete disappearance of pain in the parts supplied by that nerve.

Naturally, a local motor and sensory paralysis was produced, which disappeared in a few days, without recurrence of the pains. The wound soon healed, and September 25, I proceeded to further stretching. At one operation *both crurals and the right ischiatic* were subjected to a most thorough stretching. The wounds healed as before. Effects of second operation, same as the first: *all pains permanently disappeared*, the immediate paralysis of motility and sensibility was relieved in a few

days. When the patient first attempted to walk, he declared that he could again determine what was under foot. These attempts were at the outset feeble, but speedily became of normal vigor when, most unexpectedly, it was made manifest that the *ataxic symptoms likewise, had completely vanished*. He left the hospital to attend to his affairs, but, subsequently came again under treatment, complaining of weakness and pains in the arms; he was, however, free from all ataxia and disturbances of sensibility in the legs, walking about without any support.

In this case the peripheral nerves seemed to be the seat of the disease. (*Berlin Wochenschrift*, No. 48, 1879.)

PATHOLOGY OF TABES DORSALIS.

Erb (*Deutsch. Archiv. fur Clin. Med.*) has sought to determine the relative value of the various symptoms in the diagnosis of Tabes Dorsalis, through analysis of the observations accumulated by himself during the past two or three years. Especial study was given to certain phenomena which only recently have been carefully noted.

The "lancinating pains" occurred very early and very commonly, likewise the failure of the "tendon-reflexes." The analgesia, first described by Berger, consisting in a deficient sensibility for intensely painful injury, *e. g.*, piercing of a fold of skin, forcible pinching, etc., while the sensibility for gentle contact, slightly painful irritation, *e. g.*, superficial pricking of a needle, remains of normal intensity, deserves to be considered also an early and frequent symptom. Among the other symptoms, "Spinal Myosis," *i. e.*, contraction of the pupil with immobility upon exposure to light, but retained excitability upon efforts at accommodation, was prominent. But, as Myosis is not constant, *Erb* prefers to designate the phenomenon, "Reflex rigidity of the pupil" (*reflectorische Pupillenstarre*). This symptom was present in sixteen cases out of twenty-eight, but does not appear at a very early stage. Since it otherwise occurs frequently only in progressive paralysis, and then only in connection with inequality of the pupils, it may be regarded as pathognomonic. Ataxia, sensation of weariness and weakness

in the legs, tottering with closed eyes, impotence were frequent and early symptoms. In 17 out of 44 cases, paralysis of the ocular muscles was an early symptom; atrophy of the optic nerve in 6 out of 43 cases.

In regard to the etiology, the author is inclined, with others, to regard syphilis as a possible cause, he found a history of syphilis in half of the cases examined where that disease was had in view. However, there is as yet no sufficient basis for the establishment of a "Syphilitic Tabes."

PELVIC LYMPHANGITIS AND ADENITIS FOLLOWING METRITIS.

At the meeting of the "Medical Society of the Hospitals," held December 12, 1879, M. Martineau presented a specimen illustrating the position which he has taken in regard to the connection between the uterus and the lymphatics in cases of metritis. "According to him, in every metritis, of whatever nature it be, there is inflammation of the lymphatic network of the mucous membrane. On the part of this network, the inflammation extends to the trunks of the lymphatics, and attacks the ganglia; most frequently it remains limited to these organs; but, in certain cases, it extends to the cellular tissue which envelops them; it produces then a perilymphangitis, a periadenitis, capable of propagating itself to a distance, and of being the point of departure for inflammatory deposit more or less extensive. Such would be the origin of periuterine inflammations, consecutive to metritis, such as phlegmon of the broad ligament, pelviperitonitis, etc. He has, for a long time, maintained this position in his clinical instruction, claiming that, without exception, he has always been able to feel the enlarged ganglia of the broad ligaments in the lateral culs-de-sac, but the specimen presented was the first case in which he has had opportunity of demonstrating his view *post mortem*."

M. Dumontpallier observed that this was a scrofulous patient, which might account, partially at least, for the multiplicity of pelvic adenites which were found; he thought that, on the whole, it was rather rare to find, in such cases, adenites so

numerous and so manifest by the size of the ganglia; that if such enlargements have escaped the observation of careful anatomists, in post mortem examinations, until recently, they cannot be very apparent, and he thought it must be very difficult to determine them clinically.

M. Martineau responded that he invariably found them in cases of metritis, even in patients who were not scrofulous.

M. Hervieux said that in *M. Martineau's* patient the metritis was chronic; that a chronic or subacute inflammation was necessary in order to produce these enlargements; in acute phlegmasiæ, as puerperal metrites, there are not enlarged ganglia; when in cases of this kind, enlarged, hardened masses are found, they are not adenitic formations, they are inflammatory deposits of the cellular tissue, circumscribed phlegmons. It is in chronic metrites with frequent relapses, that numerous ganglia are discovered.

M. Martineau added that his claim referred only to the ganglia of the broad ligament. He finds it often impossible, always difficult, to recognize the post pubic adenites.—*Gazette Hebdomad*, December 19, 1879.

NEW METHOD OF OPERATION UPON WHITE SWELLING.

BY M. LÉTIÉVANT, Surgeon in Chief of l'Hôtel-Dieu, of Lyons.

The excellent result from extra articular scraping [which he had repeatedly practiced in cases of fungous growths about joints] has led me to make abrasion of the fungosities of certain white swellings.

Common white tumors, or fungous synovites (I speak here only of those) begin generally by fungosities formed on the internal surface of the synovial membrane. These fungosities develop, distend and then perforate the articular capsule, and accumulate in one or several points beneath the aponeurosis and the skin.

These fungosities constitute of themselves the morbid lesion in fungous synovitis. The bone in these cases is only altered by their presence. This alteration, slight moreover, is only on

the surface. The bone is then as if eroded in spots. The cartilage, attacked sometimes upon its edges, is detached in little particles, or the edges have disappeared by velvety alterations, sometimes the cartilage has wholly disappeared.

The eroded extremity of the bone has no lesion in its thickness, neither abscess nor internal fungosity nor sequestrum. The trouble is the fungosity. The alterations of the bone or of the other tissues are only accessory and symptomatic.

It seems to me useless, in these cases, to sacrifice a bony mass, because it is surrounded with a fungous which has slightly altered its surface. When there are found in one or two points, deep fungosities (a thing which I have never observed), it would be necessary to clear it out, without on that account amputating or resecting.

Remove the disease, nothing but the disease. Respect what is sound, all that is sound.

So doing, one would secure: 1st, economy for the organism, in the work of repair; 2nd, exact adaptation of the articular surfaces, left in their normal relations; 3d, more complete preservation of the ligamentous articular capsules which will scarcely be disturbed; 4th, a precision in the movements, which the methods in use do not ordinarily give.

This last important consideration, it seems to me, should require this method in the fungous synovitis of the elbow, for instance, resection in these cases appearing to be abandoned by some surgeons, by reason of the exaggerated mobility which is the consequence of it, and which leaves a useless and embarrassing member.

From the result of five cases which he here reports, he concludes:

1st. That total abrasion of the fungosities of an articulation is possible.

2d. That this treatment of the elbow is quite innocent in its consequences.

3d. That relatively the repair after this mode is effected with rapidity.

4th. That in its remote results, this method preserves the precision of movement, and avoids for the elbow, lateral flexion and inertia from exaggerated mobility.

5th. That this method increases the field of anatomico-pathological studies upon intra- and extra-capsular disorders, caused by fungosities.—*Gazette, Hebdomad*, December 19, 1879.

CANCER UPON A SURFACE PRIMARILY OCCUPIED BY LUPUS.

BY PROF. EDUARD LANG, *Syph-Derm. Clinic at the University of Innsbruck.*

Lupus is characterized by its slow development; its ravages generally can be traced back three years to its first appearance. Its course is inconstant, the local lesion at times increasing, again diminishing; indeed, short intervals of apparent quiescence may be noted. The destructive action of lupus, consequently, is very gradual; this fact is of the utmost value in the differential diagnosis between lupus, cancer and syphilis.

When cancerous growth is superadded to lupus, the local condition undergoes a sudden and complete change: a small tubercle that for weeks had manifested scarcely any alteration, becomes a rapidly growing mass; an ulcer, long evident, gives rise to erosions that almost hourly advance upon its borders, and burrow deeper into the underlying parts.

November, 1878, a stoutly built and fairly nourished man of 57 years, appeared at the clinic, exhibiting extensive lupus of the face and a limited cancerous growth in its midst. The lupus had existed 47 years, the cancer 6 or 7 weeks only; only the cheek, right half of the upper lip, upper eyelids and superior portion of the forehead, were free from lupus; temples and auricles were involved, the latter being greatly distorted. The whole of the bridge of the nose and the adjacent part of the right cheek was covered with a thick, dark colored crust, which covered a continuous ulcerated surface. A smaller ulcer was upon the left cheek.

Immediately in front of the lobule of the left auricle, arose a rounded tumor, 4 ctm. in diameter 2 ctm. in thickness. It had a slightly constricted base. Its surface was partly covered with a crust and presented fissures and elevations; it was of a reddish color and in spots necrotic; the tumor was soft but not distinctly defined from the surrounding surface nor readily movable. The patient complained of no pain. Evidently, the growth was cancerous.

Experience has shown that cancer, attacking tissues already the seat of lupus, makes rapid progress. The parts, made less

resistant by the lupus infiltration, encourage the advance of the more energetic growth.

How it happens that cancer associates itself with a lupus that has existed for years without complications, is a most interesting question, but as yet no satisfactory solution has been made. Ingrowth of epithelium can not be the sole cause, as this is commonly found, while superadded cancer is rare.

In the case here described nothing in the clinical history explained the appearance of the new lesion. The parents were thoroughly sound and reached a ripe old age. His ten brothers and sisters are all living and healthy. In his tenth year the lupus appeared upon the left ala of the nose and gradually involved the head to the extent described above. The cancer began as a tubercle. But little had ever been done in the way of treatment for the lupus; the cancerous tubercle had not been meddled with.

I determined to remove the cancer at once. Using a sharp-edged spoon, I scooped it out, and then carefully scraped away all the softer portions of the adjacent tissues in hope of removing all vestiges of the growth. Carbolic acid dressings and daily penciling with Fowler's solution. February 1, 1879, the wound had fairly cicatrized. The patient at the same time was subjected to the usual treatment for lupus, taking Ferr. Iodide and subsequently Fowler's solution.

At the present time, almost a year after the operation, there is no recurrence of the cancer.

Under the microscope, the part scooped out exhibited cancerous structure only; that removed by scraping undoubtedly would have presented lupus elements as well, since the adjacent tissue was obviously infiltrated with lupus cells—isolated tubercles.—(*Vienna Wochenschrift*, No. 48, 1879.)

REMARKABLE CASE OF EARLY VIABILITY.

M. Prof. Bailly reports the following interesting case of a viable infant born at six months and twenty days of gestation. Mme X., miscarried early in 1877. She recovered rapidly, and menstruated regularly for several months, the last appearance of the flow being July 3d to 9th, 1877. On January 28th she

was delivered of a boy whose development corresponded to the duration of gestation as had been estimated. The infant was wrapped carefully in cotton, and artificial heat constantly supplied. He was fed for two days with a spoon, cow's milk diluted with warm sweetened water. On the third day the mother had a supply of milk, but as the child was too feeble to nurse, it was drawn off with a breast-pump and given to the child. He was fed hourly two teaspoonfuls. This quantity was increased, the third day to three spoonfuls, in a week to four, and afterwards a spoonful was added to each meal every week. At birth, the father's finger ring could be passed over the foot nearly to the knee. Thirteen days after his birth he weighed 1,230 grammes (2.7 lbs). After eight days he began to take the breast a little, and early in April, they ceased to feed him with a spoon. The child has now (December, '79,) sixteen teeth, weighs 10 kilogrammes (22. lbs.), walks with agility, says some words distinctly, and shows not less intelligence than other infants of his age.—*Archiv. de Tocol., December, '79*

LONGEVITY.

The most curious, actual example of longevity, is that of Michael Solis, whose existence M. L. Figuier has made known, and who has reached an age which is estimated at over one hundred and sixty years. Solis, the oldest man in the world, is a half-breed of Bogota, in the republic of San Salvador. He lives in an extremely simple manner and attributes his extraordinary old age to his sobriety. "I eat only once a day," he said recently to Dr. Hermandes, who went to see him, "but I eat only the most nourishing aliments. My repast lasts half an hour. I fast the first and fifteenth of each month, and that day I drink as much water as I can bear. That is my secret."—*Union Medicale, Gaz. Hebdomad.* November 28, 1879.

REPORTS ON PROGRESS.

THERAPEUTICAL REVIEW FOR 1879.

Fuchsin has been employed with benefit in acute and chronic albuminuria. Quebracho has been recommended for the dyspnoea, accompanying various pulmonary difficulties. Pyrogallie acid is said to be as efficient as the chrysophanic in psoriasis, at the same time being more gentle in its action; it has also been used in lupus and syphilis. Vidal found gurjun oil of value in gonorrhoea. The oil of eucalyptus is said to have been successful as an inhalation in pharyngeal diphtheria. Nicholson speaks well of agrimony in tenia and scorbutus. Sclerotic acid is now believed to be the active principle of ergot of rye. Borocitrate of magnesia is thought to be a solvent of urinary calculi. Scillain, the alkaloid of scilla, possesses properties similar to those of digitalis. Pisturia, another new drug, has been found to be clearly allied, in some respects to tobacco. Euonymin and iridin have come into use as hepatic stimulants. Duboisin has been used to dilate the pupil, to control night-sweats, and as an antidote to morphia poisoning (in animals). Jaborandi, and its alkaloid, pilocarpin, has been used with apparent benefit in renal diseases, with albuminuria and dropsy, in night-sweats of phthisis, in syphilis, in pleuro-pneumonia, in malarial fevers, in mumps, cholera, hiccup, in chronic eczema, and as stimulant to the growth of the hair; in obstetrical practice, as a uterine stimulant, both in premature and natural labor, the results have not been so satisfactory. Coto bark and paracotoin have proved useful in the diarrhea of phthisis and of exophthalmic goitre, and in the night-sweating of phthisis. Arsenic has been found to diminish the blood corpuscles, when given internally in medicinal doses. In addition to other uses, iodoform has been recommended as an inunction to the nape of the neck in acute hydrocephalus. Eserin, duboisin, pilocarpin and gelsemin, have been largely used by the ophthalmologists. Nocturnal enuresis has been relieved by subcutaneous use of strychnia. Chloral

has been found the best remedy in strychnia poisoning. Carbolic acid inhalations have been lauded in whooping-cough. Benzoate of sodium has attracted much attention in the treatment of phthisis. Cold water enemata have been shown to retain high temperature in fever; warm water injections are said to be of great value for controlling uterine hemorrhage, and syringing with hot water an excellent hemostatic for oozing after surgical operations; the hot bath has been lauded in the treatment of shock. Ergot has again been highly recommended in acute pneumonia, and the salicylate of iron has been prescribed in anemia, nephritis, erysipelas and diphtheria; colchicum has been given hypodermically in rheumatism. It has been discovered that iron salts are excreted mainly by the bowels.—[*Med. Times and Gazette*, Dec. 27, 1879.]

MONTHLY REPORT ON THE PROGRESS OF THERAPEUTICS.

Iodoform in Gynecological Practice.—E. HEINRICH KISCH finds that iodoform is not only useful as a corrective of the pain and bad odor of cancer cervicis uteri, as noted by others, but that it is also of high value for the purpose of causing the absorption of exudations, favorably altering the secretion of the diseased mucous membrane, and materially reducing the hyperesthesia. He considers the absorptive efficacy of iodoform to be far superior to that of the customary iodide of potash solutions and iodine ointments; it has also the advantage over tincture of iodine, of not irritating the erosions or ulcerations of the cervix to which it is applied. Its local anesthetic effect is greater than that of any other preparation of iodine.

He uses a solution of one part iodoform to ten of glycerine, with the addition of six drops of ol. menth. pip. (to be shaken before using). The oil is added to correct the peculiar odor of the iodoform. A cotton tampon is to be saturated with the solution, and left in contact with the vaginal portion of the cervix for several hours; at the same time the solution is to be rubbed, for two or three minutes, into the skin over the lower part of the abdomen and the inguinal region; these parts are then to be

covered for several hours with thin gutta-percha. This treatment may best be employed at bed-time; in the morning the tampon should be removed, and the abdominal surface washed off.

In the fifty cases thus treated no bad results whatever were observed. Character of cases: (1), Chronic metritis, giving rise to hyperplasia of the uterus, especially of the cervix, which becomes irregularly hardened, infiltrated and fissured with follicular ulcers. This condition is strongly suggestive of cancer. The iodoform, in a few weeks, materially lessened the hyperplastic swelling, checked the discharge, healed the ulcers, and dissipated the various neuralgic pains. (2), Chronic catarrhal and hypertrophic condition of the cervical mucous membrane, chronic endometritis, erosions, papillary and follicular ulcerations of the os. Frequently, in a few days, the treatment effected a great improvement in the nature of the secretion. In some cases even large papillary growths of the mucous membrane rapidly diminished. (3), Especially were benefited old chronic inflammatory affections of the pelvic peritoneum and pelvic cellular tissue, both when due to puerperal disease and to trauma. In a series of cases of perimetritis, perioöphoritis, etc., the infiltration, which was very considerable, sensitive upon pressure, and rather fixed in position, was removed in a comparatively short time.—[*Berlin Clin. Wochenschrift*, No. 52, 1879.]

Hooping-cough—Treatment by Inhalation of Potass. Bromide.—THEODOR KOERNER, of Trebnitz, claims to have had great success in the treatment of hooping-cough during a recent epidemic, as well as in his previous practice, through the use of potass. bromide. He used generally a 2 to 5 per cent. solution, directing it to be inhaled three times daily, each inhalation consuming about 20 grammes. "The result is astonishing." Immediately after the first inhalation, a decided improvement was observed; in three to five days the severe paroxysms ceased, and expectoration became easy and without hindrance. A few days later the disease was, for the most part, eradicated. As a rule, children will use inhalations more readily than they will take medicine.

The Doctor expresses surprise that so excellent a remedy is not in general use. He thinks that failure of success is due to ignorance, on the part of the attendants and nurses, of the

proper method of using the inhalation apparatus; he advises, consequently, that the physician particularly guard against this source of failure.—[*Berlin Clin. Wochenschrift*, No. 46, 1879.]

Nitro-Muriatic Acid in Typhoid Fever.—F. P. PORCHER recommends nitro-muriatic acid (with brandy and nourishment), as more effective than turpentine or any other agent, in the treatment as well as prophylaxis of typhoid fever.—[*North Carolina Med. Jour.*, Dec., 1879.]

Iodized Phenol in Eczema Marginatum.—W. J. H. BELLAMY finds that the combination of iodine and carbolic acid, recommended by Dr. Battey in the treatment of diseases of the uterine mucous membrane, is also most satisfactory in the treatment of itching skin diseases. The formula is

R Iodinii crystal, ʒss.

Acidi carbolici crystal, ʒj.

Mix with gentle heat. He usually dilutes with equal quantity of glycerine for the first application. A camel's hair brush, or glass rod may be used to apply the remedy. He considers it indicated where there is intense itching, with probable presence of parasites.—[*North Carolina Med. Jour.*, Dec. 1879.]

Naso-Pharyngeal Polypus Treated by Interstitial Injections.—M. BARTHÉLEMY treated successfully a case of naso-pharyngeal polypus in a child fourteen years old, by the interstitial injection of chloride of zinc. The injections were made alternately by the nose and by the mouth. In order to facilitate the latter injections, the soft palate was divided. The tumor had almost entirely disappeared, the nasal passages were free from obstruction, and the incision of the palate had united, except at the velum, which remained bifid.

M. Th. Auger advises a solution of perchloride of iron instead of the chloride of zinc.—[*Gazette Hebdomad.*, Dec. 12, 1879.]

Ixora Dandanea in Dysentery.—DEB finds this plant a very valuable remedy in cases of dysentery, when administered in the early stages of the disease. He uses a tincture of the fresh root, (four ounces to the pint of alcohol), in doses of two to four grammes (one-half to one drachm). It causes no nausea, and, moreover, has an aromatic, agreeable taste.—[*Indian Med. Gazette*, Oct., 1878. *Bulletin Therapeut.*, July, 1879. *Gaz. Hebdom.*, Dec. 5, 1879.]

EDITORIAL.

VOL. III.

FEBRUARY, 1880.

No. 2.

INFLUENCE OF THE NERVOUS SYSTEM ON SWEATING AND TEMPERATURE, AND OF SWEATING ON THE FEBRILE TEMPERATURE.

For some time past, the fact that the secretion of sweat is under the influence of the nervous system, has been recognized. Copious sweat discharges can be produced in an amputated limb, and this, together with the fact that the same result can be obtained by stimulating certain nerves distributed to limbs, the temperature of which is below the normal, shows that the secretion is independent of changes in the circulation. It demonstrates, furthermore, that sweating is not a mere transudation, but the result of the activity of special glandular cells, which activity may be called forth by a stimulation of certain nerves, just as we observe to be the case in the salivary glands. For these facts we are indebted chiefly to Luschsinger, whose experiments have been repeated and confirmed by Nawrocki. These observers, it seems, find¹ that the sudoriparous nerves running in the sciatic nerve, are derived from the abdominal cord of the sympathetic; for if this is divided and the lower extremity stimulated, sweat breaks out on the foot, though no such secretion takes place if the sciatic is first cut. After division of the sympathetic in the abdomen on one side, the animal no longer sweats on that side when exposed to heat. The sudoriparous fibers do not, however, arise in the great sympathetic, but appear to emerge from the spinal cord by the rami communicantes of the first four lumbar roots, and the last two or three dorsals.

¹ *London Lancet* (American reprint), December, 1879, p. 784.

Sweating can also be induced by reflex action, and, as is well known, in a marked manner by jaborandi and its active principle—pilocarpin. Luschsinger is of the opinion that the effects of this drug are due to its acting as a direct stimulant on the nerve centres, for, after tying the abdominal aorta in a cat, and injecting pilocarpin into a vein, the posterior extremities were soon bathed in sweat, though the drug was not able to reach these parts owing to the obstruction thus produced. Atropine inhibits the secretion of sweat. After the injection of pilocarpin, if atropine be injected, the commencing perspiration is arrested in about ten minutes. If pilocarpin be injected into one of the feet of an animal still under the influence of atropine, sweat soon breaks out on this foot, while the rest of the body remains dry.

Nawrocki satisfied himself that there was in the medulla, a common centre for the secretion of sweat; and followed, by means of sections at different points, the course of the fibres of the sweat-nerves for the anterior extremity, through the brachial plexus and found that they entered the spinal cord between the third and fifth cervical vertebræ. Adamkiewicz also finds that the secretion of sweat is independent of the circulation, that it may be induced by artificial or voluntary stimulation of the muscles or their nerves, by mental stimuli, and, as a reflex act, by stimuli applied to the skin. Heat excites it, and there appears to be a direct relation between the activity of the secretion and the temperature of the several parts of the body. He believes, however, that the motor centre for this secretion is situated in the surface of the brain, and that the nerves pass through the medulla to the spinal cord, uniting at the secretory centers which are probably placed in the anterior horns of the gray matter. As to what nerve-trunks the motor fibres accompany as well as the points of union with the sympathetic, there is some difference of opinion.

Concerning the influence of the nervous system on the temperature of the body, opinions differ widely, and experiment and research have not served to reconcile these differences. Indeed, experiments undertaken to substantiate some hypotheses have served to give origin to others. It would be unprofit-

able to discuss this question here at any length, but we will call attention to the conclusions lately arrived at by Perinaud,¹ after numerous careful experiments. He was led to the inquiry by observing that, in a case of fatal epileptiform convulsions, the rise in temperature, which occurred *pari passu* with the fits, did not cease with the cessation of the fits, but continued to mount till death, which occurred six hours later, when it reached 108° F., and soon after death, 110°. It then being evident that this great rise in temperature could not be due solely to the muscular contractions, Perinaud thought a more plausible explanation was found by assuming that it was owing to a general relaxation of the vaso-motor nerves after their undue excitation. His conclusions, however, led him to the belief that the spinal cord affects animal heat by means of nerves distinct from the vaso-motor system, and, indeed, which may be imagined to have an action quite contrary to that set of nerves. But he thinks it is not necessary to invent a distinct system of "calorific" nerves; he believes those nerves which regulate the process of nutrition and secretion, of which calorification is simply the physico-chemical result, to be sufficient.

It seems at least fair to conclude in the face of what evidence we have, that the maintenance of the temperature is subjected to one of those regulative mechanisms in which the animal body so richly abounds; but the solution of the problem is rendered doubly difficult by reason of the fact that it involves the question, not only of the rate of the production of heat in the body, but the rate of its expenditure as well.

In this connection it is of interest to glance at some observations, made by Sidney Ringer,² with a view of determining the influence of perspiration on the febrile temperature. It has long been known that, clinically, high rates of temperature and profuse perspiration may, and frequently do, coexist. In acute rheumatism, in some cases of erysipelas, in pneumonia, pleurisy, etc., the skin is bathed in sweat, while the temperature yet remains high.

1 *London Lancet* (American Reprint), January, 1878, p. 41.

2 *London Lancet*, December, 1878, p. 550.

In Ringer's first patient, who suffered from quotidian ague, the temperature rose in an untreated paroxysm to 105° and 106° F. Just before the onset of an attack, a half grain of pilocarpin was administered, which in twenty minutes produced copious perspiration; but in spite of this the temperature rose to 104.4° , and the fit lasted as long as on previous days. As in ague the untreated fits often differ to a greater degree than this, it is doubtful if the slight diminution was due to the sweating. It was noted that the sweating produced by the drug, had very little influence on the shivering and the blueness of the nose, lips and extremities.

In the second case, the patient's temperature rose, in an untreated attack, to 104.8° . Five minutes after the beginning of a second attack, one fourth of a grain of pilocarpin was injected hypodermically. Sweating began in a quarter of an hour, and soon became profuse; but the temperature rose to 105.5° , and remained above 105° for an hour, the ague fit lasting ten hours. In still a third attack, where half a grain of pilocarpin was injected, the temperature rose to 105.2° , when the fit lasted over twelve hours. In a fourth fit, treated in the same way, the maximum temperature was 105.4° , when the attack lasted more than ten hours. He therefore thinks it fair to conclude that the free perspiration in these cases, had a very insignificant influence on the febrile temperature, and that the increased heat can not be explained by its accumulation owing to a dry skin, but he considers it due to increased production of heat, the result of a higher rate of combustion, especially of the nitrogenous tissues.

SODIUM BENZOATE IN THE TREATMENT OF PHTHISIS PULMONUM.

DR. PAUL GUTTMAN (*Berlin Wochenschrift*, December 8th, 1879), delivered an interesting lecture before the Berlin Medical Society, upon the subject of the inhalation of sodium benzoate in phthisis, which mode of treatment has excited so much interest of late. The doctor prefaces his lecture with an explanation of the theory upon which the use of the benzoate is based.

In 1877 Prof. Klebs, before a scientific convention at Munich, maintained the position that tuberculosis is a contagious disease of a parasitic nature, being caused by certain microscopic organisms, which enter the body and there increase, and that we may hope to cure it by the use of such agencies as are capable of destroying these organisms. Klebs considered that he had proved the parasitic origin of tuberculosis experimentally, as follows: If we place a minute particle of tubercle in a solution of albumen, there will shortly appear in the liquid an immense number of microscopic organisms, which exhibit lively movements, while another solution not thus planted remains free. A drop of this solution will induce the same growth in a second, and so the experiment may be continued with fresh solutions, until the original tubercle particle has become extinguished in the repeated dilutions, but still there will be found in the last a swarm of the microcosms which evidently spring from that particle. If of the last infected solution some be injected into the veins of an animal, a true and universal miliary tuberculosis will be produced.

Klebs believes that he has discovered the presence of these same microcosms in the gray tubercle of men and animals, under the form of minute bodies amidst the round tubercle cells, and sometimes exhibiting active movements.

Prof. Schneller, of Greifswald, recently published the following experimental results, that supplement those of Klebs: If tuberculous matter or microcosm, cultivated as above described,

be injected into animals through a tracheal opening, after a time, without exception, they all die of general miliary tuberculosis, much emaciated, and with alopecia. But if animals similarly inoculated, and manifesting the same resultant cachexia, be made to inhale for weeks the spray of sodium benzoate, they will survive. Also, Graham Brown, in the laboratory of Klebs, discovered that the diphtheritic fungus, when exposed to the action of a solution of that salt, or injected into animals already dosed with the salt, proves innocuous.

It is based upon these experiments, that the treatment of phthisis with inhalation of sodium benzoate has been undertaken. It is certain that a spray may penetrate into the air vesicles, if the inhalation be long enough continued.

Dr. Guttman treated with sodium benzoate at the Berlin Baracken Lazareth, 31 phthisical patients—24 male, 7 female; ages 17 to 56. The disease in a majority was far advanced. Such patients were selected as exhibited either an unmistakable hectic type, or a certain regularity in their temperatnre variations, so that any effect of the inhalations would be immediately recognized in the temperature curves. The temperature was taken three times daily. The inhalations took place twice daily, at morning and evening. A five per cent. solution was at first used, five grms. of the salt being given daily, dissolved in 100 grms. of water. Later five patients were given ten grms. daily. Finally in accordance with the recommendation of Prof. Rokitansky, of Innsbruck, 1-1000 of the body weight was adopted as the measure of the daily dose. A man weighing 50 kilograms would require, on such an estimate, 50 grms. daily, and this 1000 grms. water to make a five per cent. solution; three patients took this increased dose, two hours being consumed in the inhalation.

Of the 31 patients, fifteen inhaled for three weeks, six, fourteen to nineteen days, the remaining nine, three to twelve days; four of these last not bearing the inhalation, took the salt by the stomach, 20 grms. to 200 grms. water, a tablespoonful every half hour.

Nine died, two left the hospital, the rest are still under observation. As for results: In not one of the cases was the febrile temperature perceptibly diminished nor altered in its fluctua-

tions; neither was the bodily weight affected. The physical symptoms persisted without favorable change. The night sweats, when present, were not lessened.

It will be seen that not a single symptom was relieved.

At the post mortem of the nine that died, no indications of a healing process in the lungs could be detected. Hemoptysis seemed to be excited by the inhalation in two of the cases.

This lecture of Dr. Guttman was discussed by several members of the society. B. Fraenkel stated that he considered carbolic acid to be a better antiseptic for the lungs than the benzoate, since it is volatile. He had caused patients to wear constantly an inhalation apparatus charged with a 2 per cent solution of sodium benzoate with no good result.

Senator had also made use of the benzoate, but could not observe any improvement due to its action. He doubted much of the salt being absorbed, as the urine in the first cases did not give the proper reaction. Had not observed injurious effects upon the internal administration of the salt, even in doses of twelve grams and more daily. Called attention to the fact that in phthisis, serous effusions may take place, especially into the pleural sac, without at once being apparent, and the real bodily weight be thus obscured.

M. Wolf said: In regard to the question of complete penetration of spray into the lungs, there can be no doubt but that can take place. I have made rabbits inhale in spray 15 to 20 ccms. of a liquid containing bacteria. On killing them one to two hours afterward, the entire respiratory tract even into the air cells was found charged with bacteria. My investigations do not confirm the parasitic theory of phthisis. I have examined cases of undoubted disseminated miliary tuberculosis in man for the actual presence of bacteria in the exact site of tubercle formation. I first examined fresh, small, perfectly transparent tubercle from the omentum of children that had died of acute miliary tuberculosis. By no method of investigation could the least trace of bacteria be discovered either in the vessels of the tubercular masses or in the vessels of the vicinity; also the granules in the giant cells which have been taken for bacteria,

may be made to disappear under the use of various chemicals, ether, chloroform, glacial acetic acid.

B. Fraenkel inquired of the surgeons present if in their treatment of tuberculous inflammation of the joints, etc., they have observed any results upon the use of carbolic acid.

Langenbeck, Bardeleben, and Kuester answered in the negative.

ANIMAL VACCINATION.

The subject of animal vaccination has recently excited a great deal of attention in England. A conference on animal vaccination was commenced at the rooms of the Medical Society of London, on the 4th of December, 1879, at which Dr. Warlomont, of Belgium, read an interesting paper, advocating the use of bovine vaccine in preference to the "humanized." The chairman of the conference pointed out the steady increase in the success obtained by the use of animal lymph, referring to the procedure now employed at the numerous stations in France, Belgium, Holland, Italy, Germany, Austria, Switzerland, Russia, Spain, India, and the United States. Here, in St. Louis, the Health Department has been active during the past two or three years in introducing the bovine virus, using it exclusively in the city charities and furnishing it free of cost to our physicians. Dr. Warlomont's paper gave rise to lengthy discussion, in the course of which the old disputed points came to the surface again and some interesting statements were made. The doctor denied that the vaccine lymph deteriorates by long humanization, or long continued transference from arm to arm. He admits that years ago he held that opinion, but declares that, at the present time, nothing justifies to him the belief that lymph can degenerate. The object to be gained by the substitution of bovine vaccine for that taken from a human being, is the removal of all suspicion as to the purity of the lymph used. That syphilis may be inoculated in vaccination

with human lymph, cannot be doubted. While small-pox is a dreadful scourge, syphilis is still more terrible, and we are certainly not at liberty needlessly to expose others to the risk of its inoculation. In England, vaccination has been made compulsory, but it is the vaccination with human lymph. Strange to say, the public authorities have so far refused to have anything to do practically with lymph taken directly from the calf; the method of Jenner. Dr. Cameron, M. P., has drawn up a bill to be presented at the next session of Parliament, which is intended to procure the substitution of bovine for human lymph. The *London Times* has taken up the controversy, and there seems to be a possibility of the adoption of the animal vaccination by the national vaccine establishment. This latter organization, however, insists that vaccination, as effected under its direction, is more successful than that made upon the continent with the bovine lymph. A contra-statement is made that bovine lymph acts more certainly and more thoroughly, besides being free from the fatal suspicion of conveying diathetic diseases. The *Lancet*, in an editorial, November 22, 1879, calls attention to the fact, "That India has the enviable distinction of being the first portion of the British empire in which an attempt has been made to make just legislative provisions for animal vaccination."

At the adjourned meeting of the conference, December 18, Prof. Simonds, of the Royal Veterinary College, gave the following interesting information: Before the introduction of vaccination, and when small-pox was general, vaccinia was common among cows; since small-pox has been brought under some sort of control, and has prodigiously diminished in amount, it was the rarest of diseases in the cow-sheds. It is a disease wholly limited to the cow, and to the milch cow. The inference is just and natural that vaccinia is the product of variolous inoculation, accidental or otherwise, in the cow. The public attention is also called to the fact that the very virulent form of small-pox generated in the army during the Franco-Prussian war, failed to spread or inflict serious mischief in communities where vaccination was general and carefully conducted. In

America, the epidemic that ravaged the non-vaccinated population of Montreal a few years ago, affords a notable illustration of the effective use of this protection.

BOOK REVIEWS AND NOTICES.

THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES. BY FREEMAN J. BUMSTEAD, M. D., LL. D., late Professor of Venereal Diseases in the College of Physicians and Surgeons, N. Y., etc. Fourth edition, enlarged, revised and in great part re-written by the author and by ROBT. W. TAYLOR, A. M., M. D., Professor of Dermatology in the University of Vermont, Attending Surgeon to Charity Hospital, N. Y., etc., etc. With one hundred and thirty-eight wood cuts. 8vo. pp. 835. Philadelphia: Henry C. Lea, 1879.

This now classical work on venereal comes to us in its fourth edition, re-written, enlarged and materially improved in every way. The late Dr. Bumstead associated with him in the labor of revision Dr. R. W. Taylor, a gentleman of wide reputation as a syphilographer and dermatologist. As heretofore, the Introduction is occupied with considerations bearing upon the history and nature of gonorrhea, syphilis and the chancre. In regard to the origin of syphilis the authors seem disposed to give considerable credit to the view that the disease existed among the American aborigines, and was conveyed by the sailors and soldiers of Columbus to Europe.

One of the most interesting parts of the book is the chapter devoted to the pathology of the chancre, which we shall submit without comment, merely taking occasion to say that we do not consider the doctrines advanced as by any means proved. We may sum up the conclusions arrived at, in their own words, as follows: 1. The chancre is entirely distinct from syphilis. 2. The chancre, however, does not depend on a *specific virus*, incapable of being generated *de novo*. 3. The chancre, in most cases met with in practice, is derived from

a chancroid, but it may arise, especially in persons debilitated by any cause, from inoculation of the products of inflammation, either simple or syphilitic, and subsequently perpetuates itself from one individual to another as a chancroid. 4. The simultaneous inoculation of the syphilitic virus and of the products of inflammation, gives rise to the mixed chancre and explains the different degrees of ulceration which the initial lesion of syphilis is liable to assume.

The subject of gonorrhea receives more extended notice than in former editions, advantage being taken of all the additions to our knowledge of the pathology and treatment of the disease, which have been published in the past few years. The non-specific nature of urethritis is insisted upon. The researches of Desormeaux with the endoscope are quoted at length. With the exception of more formulæ, the active treatment of gonorrhea recommended in other issues, remains about the same. *Cannabis sativa* is mentioned favorably as an internal remedy after the more acute symptoms have subsided; the so-called mother tincture is given in doses of ten to fifteen drops, in water, three or four times a day. As a good deal has recently been written about *gurjun* balsam in urethritis, Vidal's formula, which we find here, may not prove uninteresting:

R. *Gurjun* Balsam, 1 drachm.

Gum, 1 drachm.

Infusion of Star Anise, 10 drachms.

To be divided into two doses and taken directly before meals.

Considerable space is devoted to the expectant treatment of clap, advocated by the modern French school, which consists simply in waiting four or six weeks before commencing active treatment, *i. e.*, by injections, *copaiba*, etc. During this interval, while patiently awaiting the "*ripening*" (Diday) of the clap, various hygienic and dietetic measures are recommended, such as local and general baths, ptisans, avoidance of stimulants, mental and physical, etc., etc. Although, as Bumstead remarks, no such treatment could be carried out here, he further declares that he "will not say that their course is not the best; the cases which every one meets with, of a clap hanging on month after month under ordinary treatment, are enough to lead us to try anything which promises better success." This sentence is quoted as a matter of consolation, to show the average practitioner that he is not singular in his

experience of intractable gonorrhea, but that even an eminent venerealist has met with difficulties and vexations in this most obstinate complaint. Further on Fournier is quoted as saying that "we meet with cases which defy all treatment."

Besides chronic gonorrhea and gleet, we find a good description of the condition known as chronic urethral moisture, a pathological state that is often the *bête noire* of both physician and patient. This latter affection is nothing other than a prostatorrhea. The marked distinction drawn between gleet and chronic gonorrhea is not very obvious to us.

Issue is taken with the dictum of Otis that "chronic urethral discharge means stricture," and that the removal of the latter will cure the former; on the contrary, while it is admitted that the removal of the stricture is required in all cases, it is not admitted that this measure will stop the discharge. The urethroscope is considered as a valuable adjunct to treatment.

The chapters devoted to balanitis, gonorrheal peritonitis and sub-peritoneal abscess, phimosis, paraphimosis, folliculitis and peri-urethral phlegmon, hydrocele, hematocele, varicocele, inflammation of Cowper's glands and vesiculæ seminales, affections of the corpora cavernosa, etc., etc., are in some instances new additions to the work, and are in all quite exhaustively treated and brought up to the present state of knowledge.

It is interesting to note, that in the treatment of swelled testicle, the nauseants and emetics formerly recommended, are not now advised. Aconite is considered preferable. The section on sexual hypochondriasis is well considered, and reiterates much of the wise advice, and is confirmatory of the experience of Sir James Paget. The fallacy of Noeggerath's theory of "Latent Gonorrhea" in women is exposed.

Passing over the many pages on strictures of the urethra, which, by the way, we regard as somewhat out of place in a work of this character, we come to a consideration of the chancre and its complications. The interesting fact is brought out that the chancre is on the decrease. Between the years 1840 and 1850, at the Midi Hospital, the ratio of chancres to chancroids was as 1 to 4; in the same hospital, in 1874, there were 6 chancres to 1 chancre recorded. Iodoform, powdered or in solution with ether, is highly lauded as a local application. This drug is also confidently recommended as very valuable in many cases of phagedenic chancre.

The aspiration of buboes is condemned. The method of Auspitz is commended. No mention is made of the use of a strong ointment (3ii-iv to 3i) of iodoform, well rubbed in several times daily, as a valuable abortive treatment for buboes. This has proved very successful in our hands, and, we thought, was generally known, although we do not recall any notice of it in print.

The pages devoted to syphilis are the most interesting in the work, and display enormous labor and research, which may be truly said of the whole volume. A vast amount of information is embodied in this section, which was not contained in former editions.

The fact of syphilitic reinfection is noted, and, of course, fully accepted; but, at the same time, the sources of error in diagnosis are carefully pointed out. In previous editions the chancre was not regarded as merely a local lesion, but as the expression of an already existing syphilitic blood state; in this issue this point is not so strongly pressed, although still advocated; for, while denying that early excision of the chancre had been of any avail in the hands of the writer, the well-known results of Auspitz and others are quoted with respect. In the chapter on the "Nature of Syphilis," written by Dr. Taylor, we find a curious contradiction of the pathological views held by Bumstead on this very point. If we read him aright, it is there stated that the initial lesion is a local new growth, whose cells, like those of cancer and sarcoma, pass into and infect the lymphatic ganglia, and finally get into the general mass of the blood, only then producing constitutional contamination.

In most works on syphilis, a thorough and accurate account of the skin lesions of syphilis is generally neglected.

Dr. Taylor, as we had every reason to expect, has performed this part of his work with unusual excellence. The description, differential diagnosis, and treatment of the syphilides, are considered in a manner which leaves nothing to be desired. A separate chapter is given to the simple cutaneous affections which, by inexperienced persons, are apt to be regarded as of venereal origin.

In the general treatment of syphilis, mercury is regarded as the sheet-anchor of hope; the iodide of potassium is recommended for the later troubles, although even then mercury is advised as an adjunct. The potassium dissipates existing tertiary lesions, but mercury is antidotal to the disease. Mercurial

fumigations and inunctions are thought to be more efficacious than the internal use of the drug. The Hot Springs of Arkansas are regarded as without value in the treatment of syphilis, aside from change of air and scene, and the undoubted benefit to be derived from the use of specific remedies employed by the resident physicians; otherwise water heated in a tea-kettle would be quite as effectual. It is satisfactory to note the tone of hopefulness as to the curability of syphilis, which is maintained throughout the book. It has long been held by Diday that syphilis is a self-limiting disease, and the views so ably advanced by him count many adherents; indeed, with the precise knowledge we now possess of syphilitic reinfection, no candid mind can doubt its general truth. The text is profusely illustrated with excellent wood cuts, of which some are original, and others borrowed from the best sources.

Our notice of this admirable work has already been more extended than we had anticipated, although many of the most important chapters have been of necessity overlooked; yet we feel that what has been written has done but scanty justice to the merits of this truly great treatise. No man who wishes to obtain a thorough knowledge of venereal diseases—and it is a knowledge which every practicing physician should possess—can afford to be without Bumstead and Taylor.

The imprint of Mr. Lea is a guarantee of the excellence of the typographical execution of the work.

A SYSTEM OF MEDICINE: Edited by J. RUSSELL REYNOLDS, M. D., F. R. S., Professor of the Principles and Practice of Medicine in University College, etc., etc., etc.; with numerous additions and illustrations, by Henry Hartshorne, A. M., M. D., formerly Professor of the Practice of Medicine, in Medical Department of Pennsylvania College, etc., etc. In three volumes. Volume I., General Diseases and Diseases of the Nervous System; Volume II., Diseases of the Respiratory and Circulatory Systems. Philadelphia: Henry C. Lea, 1879.

Reynolds' System of Medicine is too well known by name to all reading men in the profession, to demand an extended notice of this American edition. The original work, in five volumes, was beyond the reach of a great many practitioners who would have been very glad to own the work; and we think that Mr. Lea has done well to reduce the number of volumes to three. This has been accomplished by the adoption of double columns and narrow margins, with small, but very

clear and distinct type. By these means not only the original work, but numerous and quite extensive additions, by the American editor, Dr. Hartshorne, are compressed into three octavo volumes, of about 1,000 or 1,100 pages.

The very ablest men in the profession, in Great Britain, are the authors of the various articles; and the additions, made with excellent judgment and great care by Dr. Hartshorne, bring the present edition fully up to the advancement of the present day, and also present points in which the experience of American practitioners has been found to differ from that detailed by the authors.

Among the most extended additions in the first volume are the chapters on scrofula, hystero-epilepsy and chlorosis, and sections on the treatment of rheumatism, on puerperal convulsions, on metalloscopy and metallotherapy and on locomotor ataxia. These have attracted our attention in looking through the book. There are many others all through the volume, all of which are included in brackets and signed with the editor's initial.

In the second volume the additions of the American editor, are, perhaps, less extensive than in the first; for diseases of the nervous system, have attracted more than usual attention during these late years, and the results of much study and research, were necessarily to be introduced into the volume treating of those diseases.

We note, however, additions to the article on croup, and are surprised to learn that the disease so common among us, under the name of spasmodic croup, or night croup, is not mentioned in the English work. Recent researches in regard to the communicability of phthisis, are given in Dr. Hartshorne's additions. With regard to the treatment of pneumonia, we observe that Dr. Hartshorne advises early venesection, maintaining that this practice is regaining favor among American practitioners. He gives additional facts bearing upon the treatment of pericarditis by paracentesis of the pericardium, and gives a section upon atony of the heart, and a chapter upon hæmophilia or the hemorrhagic diathesis.

We most heartily recommend the work as an encyclopedia of medicine.

A BIOGRAPHICAL DICTIONARY OF CONTEMPORARY AMERICAN PHYSICIANS AND SURGEONS. Edited by WILLIAM B. ATKINSON, M. D., Permanent Secretary of the American Medical Association, and of the Medical Society of the State of Pennsylvania, etc., etc. Second Edition, Enlarged and Revised. Philadelphia: D. G. Brinton.

This volume is an octavo of some 750 pages, and contains brief biographical notices of over 2,700 physicians and surgeons of the United States. As the publisher says, "The effort has been made to include all who have visibly and publicly contributed to the advancement of medical science in the United States during the present generation."

The editing of a biographical dictionary is a work of great difficulty, and it is not to be wondered at it, if we fail to find the names of some whom we should expect to find mentioned in such a volume. No doubt, as physicians become better acquainted with the object and scope of the work, they will be more ready to supply the necessary data for making the list more complete.

It is to be regretted that, in issuing this second edition, the editor did not incorporate the additional names with the body of the work, and consolidate the indexes. Under the present arrangement we look for a name in the *index*; not finding it there, we consult the *supplemental index*; if it be not there, we still may find it in the *provisional index* to the additions and corrections. This seriously interferences with the convenient use of the volume, and should be corrected even though it be necessary to prepare new stereotype plates of the pages containing the index. It would increase the value of the book far more than the expense that would be involved.

INFANT FEEDING AND ITS INFLUENCE ON LIFE, OR THE CAUSES AND PREVENTION OF INFANT MORTALITY. By C. H. F. ROUTH, M. D., M. R. C. P. L., Fellow of University College, London, etc., etc. Third edition. New York: William Wood & Company, 27 Great Jones street. 1879. Wood's Library of Standard Medical Authors, pp. 270.

We have read with pleasure and no ordinary amount of instruction, the work of Mr. Routh on "Infant Feeding and its Influence on Life, or the Causes and Prevention of Infant Mortality." It is really difficult to review this useful book, where every chapter and page is replete with interest. That this is the third edition is an evidence that it is appreciated by the profession.

The author, by carefully arranged tables, has detailed the causes of mortality. In speaking of the conditions which favor mortality, he gives: 1st. Nature of food supplied. 2d. Those which depend on defective hygienic regimen. 3d. Those which depend upon the physical and physiological nature of infants.

In the first cause, the nature of food, of course he considers the importance of the mother's milk as the best nourishment; next to these, the various animal milks—analyzing, with great care, that of the ass, cow, goat, etc., and showing that by proper feeding of the animals they may be made to produce milk almost identical with that of the human female. He dwells especially upon the importance of the purity of the milk, and the importance of feeding it to the infant as soon as possible after it is "milked," even, if possible, that the infant should nurse it from the goat. He carefully studies the physiological condition of infancy, and shows the great importance of artificial heat, or rather that obtained from the nurse. He proves most conclusively that animal is to be preferred to vegetable diet, until after the eighth month, when the teeth are somewhat developed, very properly condemning the use of "pap" or bread victuals, and the ordinary starchy food so generally fed to infants.

I think that he irresistibly proves that the great mortality of infants is caused, first, by improper alimentation, next, by defective hygiene, insisting upon pure air, cleanliness, a proper exposure to light when not too stimulating, etc.

Most important and instructive chapters on lactation show that there are three kinds of wet nurses—the healthy nurse, the nurse affected with galactorrhea, and the nurse with deficient flow of milk.

He dwells much upon the importance of the healthy woman's nursing her own offspring, and shows to what evils she is exposed by neglecting this sacred duty—sore breasts and nipples, development of cancer or other uterine diseases.

Among the causes of galactorrhea, he enumerates peculiar temperament, etc., and analyzes with care the treatment by iodide of potassium, colchicum, belladonna, and especially proper diet.

Among the causes of defective supply of milk are age, atrophy of breasts, obesity of breasts torpor, etc. He mentions in detail the various methods of treatment, dividing them into

mechanical, medicinal, hygienic and dietetic. Among the mechanical are suction, electricity, the maintenance of conjugal relations; among the dietetic are animal soups, galactagogue drinks, beer, wine, etc. Among the medicines he places the leaves of the castor oil plant, pulsatilla, cod liver oil, and many other preparations.

These chapters alone would make this work invaluable to the practitioner. Dr. Routh has labored in a good cause, and has had the satisfaction of inducing many reforms in the management of infants, by which already many lives have been preserved. He has proved himself not only an able writer, but a great benefactor to suffering humanity. He is deserving of all praise.

The work is admirably gotten up by Wm. Wood & Co., and forms a valuable addition to Woods' Library of Standard Medical Authors.

S. G. M.

A TEXT-BOOK OF PHYSIOLOGY. By M. FOSTER, M. A., M. D., etc. With illustrations. Third edition, revised. *London: Macmillan & Co., 1879.* 8 vo., pp. xii, 720. Price \$3.50.

A new edition of Foster's Physiology every year! The third edition is not only revised, as the title has it, but has grown by eighty pages.¹ The revision has extended to almost every chapter and section of the work, the appendix not excepted. Many subjects are presented in a new way; and many chapters, *e. g.*, that on the general properties of the contractile tissues and of nerve, have been recast entirely, with material additions; and the number of the wood-cuts has been increased by a few.

We shall indicate the more important additions: In muscular physiology, the author gives greater weight than heretofore to HERMANN'S views of the chemical changes in active muscle. Extended additions are made to the sections on the vasomotor nervous mechanisms. In the sections on the pulse, the author quotes, without countenancing, MOENS'S researches on the pulse tracing and his explanation of the origin of the dicrotic wave; they will receive more favor in the fourth edition, we dare say. The chapter on digestion gives us corrected figures for the amount of acid, etc., in gastric juice, HEIDENHAIN'S new observations on salivary secretion, and new considerations on the absorption and fate of digested proteids and

¹ Cf. this Journal, vol. I., p. 213.

sugar. The extended remarks on the effects of respiration on the circulation, mention the probably rythmical action of the vasomotor center. Late researches on the nervous mechanism of perspiration are quoted. The section on secretion by the renal epithelium is enlarged, and that on glycogen recast. There is no news about the spleen. A more complete exposition is given, of the sources of animal heat, and of the regulation of its production by "thermotaxic" nervous mechanisms.

The chapter on sight is almost untouched, excepting in the parts dealing with the photo-chemistry of the retina. There are few changes in the chapter on the spinal cord, but the account of experiments on the localization of functions in the cerebral hemispheres is much enlarged. Finally, are a few notes on the nervous mechanism of parturition, and some observations on the condition of respiration, and of the eye during sleep.

G. B.

LECTURES ON THE DISEASES OF THE NERVOUS SYSTEM. BY J. M. CHARCOT, M. D. Translated from the Second Edition by George Sigerson, M. D., M. Ch. Licentiate of the King and Queen's College of Physicians; Lecturer on Biology, and Ex-Dean of the Faculty of Science, Catholic University of Ireland; Fellow of the Linnean Society of London; Member of the Scientific Society of Belgium and of the Royal Irish Academy, etc., with Illustrations. *Philadelphia, Henry C. Lea, 1879.* (St. Louis Book and News Co.)

The work of Charcot is too well known to need any extended criticism. It has taken its place in medical literature, as the great classic guide in the study of advanced neurology. No living author occupies so deservedly high a position nor is so pre-eminent as an authority as this illustrious teacher, whose lectures in Paris, attract the élite of the scientific medical world. The originality of his productions will immortalize him for all time. At first we were at a loss to comprehend the *raison d'être* of Dr. Sigerson's recent translation, in consequence of the existence of one in the series of publications of the New Sydenham Society, by the same author. We ascertained, however, after more careful perusal of the translator's preface, that "when preparing for the following version, it was judged best to await the appearance of the *second French edition*; thus the reader, in exchange for some delay, has been enabled to obtain the work in its most correct form, enlarged by about one-sixth. It was found inconvenient to reproduce

the ten plates appended to the French volume." This omission we consider a very important one. Otherwise, the translation is faithful, excellent and above all, clear and satisfactory. This is saying a great deal, for most reproductions of foreign works are very foggy.

No one interested in neurology and unable to read Professor Charcot's lectures in the original, can afford to be without Dr. Sigerson's very meritorious translation. J. K. B.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF MISSOURI, at its Twenty-second Annual Session, held in Columbia, Mo., May 20 and 21, 1879.

Of this volume we feel like saying, "Long looked for, come at last." But, though tardy, yet it is neatly gotten up in an octavo of 144 pages, bound in cloth, flexible covers—containing a report of the proceedings, the President's and other addresses, papers read, and the discussions had thereon.

President Schaufler earnestly urged the importance of a liberal and truly scientific education, rather than a popular education on scientific matters, to those about to enter upon the study of medicine; and asserted that the individual members of the profession could do much to cause the people to more highly respect the regular profession and scientific medicine than they do at present. This is to be accomplished by physicians more highly regarding their own profession, and more boldly vindicating its honor when assailed, and by giving entire allegiance to the belief that regular medicine is the only system of medicine based on scientific principles. The address throughout was replete with ripe thoughts worthy its accomplished author, and an honor to the State Association.

Under the Report on Surgery, Dr. Borek gave a brief but intelligent review of the history of the treatment of wounds and inflammations, going back a hundred years or more, and noting the advance made down to the present time.

Under the same general heading, Dr. Richmond gave the progress made during the preceding twelve months, in the pathology and treatment of a few of the surgical affections of the pelvic organs, illustrated by cases from his own practice.

Dr. C. A. Todd exhibited a papillomatous tumor removed from a patient, æt. 13, and remarked at length on the importance of an early recognition of laryngeal growths, and their mode of removal.

Dr. Hughes related the history of ten cases to show that, while absent patellar tendon-reflex is often of significance as an associated symptom of present locomotor ataxia, and might serve to excite suspicions of its approach, we were not justified in regarding it, when the only observable phenomenon, as a certain sign. Dr. H. also exhibited an æsthesiometer of his own devising.

Dr. Lutz related a case of epithelial cancer involving the face, both soft and hard parts; also a case of amputation at the hip joint, illustrated with photographs and specimens. A lengthy discussion followed Dr. L.'s paper on cancer.

Dr. Michel offered an exhaustive paper on purulent ophthalmias and their treatment, advocating mild measures for their relief.

A case of pseudo-hypertrophia musculorum, pseudo-hypertrophic paralysis, was presented by Dr. Steele, with remarks, illustrated by diagrams.

Mydriatics and myotics were fully discoursed upon by Dr. Dickinson, followed by Dr. Bryant on Bright's disease.

Dr. Engelmann, in behalf of a special committee appointed for the purpose, reported at length on a case of urethro-vaginal fistula, which had been greatly benefited by the professional attention of Dr. McAlester.

A hundred members were in attendance, and the meeting was one of the most successful ever held.

The next annual meeting will be held at Carthage, Jasper county, Mo., commencing May 18, 1880.

A. J. S.

PHOTOGRAPHIC ILLUSTRATIONS OF SKIN DISEASES. BY GEORGE HENRY FOX, A. M., M. D., Clinical Professor of Dermatology in Starling Medical College; Surgeon to N. Y. Dispensary, Department of Skin and Venereal Diseases, etc., etc. *New York. E. B. Treat.* Parts v and vi. (Through Brown & Holdoway.

Parts v and vi are mostly devoted to eczema, a disease, which from its frequency of occurrence, variety of expression, and in some instances, rebelliousness to treatment, is well worthy the space given to its consideration by Dr. Fox. The photographs represent eczema barbae, E. manum, E. e venis varicosis, E. infantile, E. papulosum, E. ichorosum et pustulosum, E. squamosum, ulcus varicosum and psoriasis annulata. The illustrations, with some exceptions, do not seem to be up to the mark of preceding issues. The accompanying text is excellent, being clear, concise and practical.

W. A. H.

THE SUMMER AND ITS DISEASES: BY JAMES C. WILSON, M. D., Lecturer on Physical Diagnosis in the Jefferson Medical College, etc. *Philadelphia: Lindsay & Blakiston, Publishers.*

This little book, of 160 pages, is one of the series by different authors, edited by W. W. Keen, M. D., Fellow of the College of Physicians of Philadelphia, etc.

They are called the "American Health Primers," and though written mainly for the public, will form a valuable addition to the physician's library. Appearing as they do just now when so much is being done to improve state medicine, they will aid the profession materially in educating the people as to its importance, their object being not so much to assist in curing disease, as to teach people how to take care of themselves, and those around them,—to instruct all classes in hygiene, and preventive medicine.

It seems useless to try to gain proper legislation on these points, with an ignorant public opposing. It is hoped that this series may assist in developing a public sentiment favorable to proper sanitary laws. And if all fill their purpose as well as the one before us, these Health Primers should be found in every library.

In this instructive little volume the first subject noticed is—the summer, its peculiarities, its influences which act unfavorably upon health, and the means of escape. Stress is laid upon the long continued, unbroken, high temperature, acting directly upon health, as well as by the production of other causes of obscure but potent influence.

At this season we must either conform our habits to its requirements, or seek refuge where the heat is less intense. The summer holiday is recommended as a good custom. An instructive and interesting account is given of the various places of resort, from the modest farm house to the fashionable watering place, from the misty mountain top to the pleasant sea shore.

And the poor are not forgotten in the account, those "who must bide at home and toil to keep the ever-snarling wolf from the door." But they must be taught that temperance and cleanliness make the body better able to withstand disease; that an evening spent in the park, upon the river bank, or on the water, gives change and restfulness and health to mind and body alike. Children's excursions, and sea-side homes for des-

titute mothers with their sick babies are highly commended. Summer hygiene is not neglected.

Sunstroke and heat fever, summer diarrhea and dysentery, cholera-infantum, summer and autumnal fevers, summer colds and hay asthma, the skin in summer and its diseases, are written upon in successive chapters, more in regard to their prevention than treatment. We can safely recommend the book as profitable and entertaining reading to every one.

J. M. R.

WINTER AND ITS DANGERS. BY HAMILTON OSGOOD, M. D., Editorial Staff of the Boston Medical and Surgical Journal. Philadelphia: Lindsay & Blakiston, 1879. 16 mo., pp. 160.

This little volume is number six of the "American Health Primers." Its authorship has properly been entrusted to a resident of a northern city, where the winter is comparatively long and severe, and where much thoughtful attention has been given to obviating the evils of cold and adapting the conditions of life to the changing demands of temperature.

It is a popular work, selecting and dwelling upon those topics, on which practical instruction can be given and needs to be insisted upon, while on the other hand, those points are judiciously avoided, which still present problems that the scientific world is yet striving to solve.

The author takes the attitude of the lay preacher, holding that his task is next to that of "pleading with a man for his soul." He quotes from Spencer; "all breaches of the laws of health are physical sins." The chief source of these sins he indicates by referring to the French proverb, *on ne meurt que de bêtise..* His aim, then, is to impress upon the general public the plain truths of hygiene. He ranges over a wide field and presents forcibly and sensibly the claim of children to judicious care.

Under the head of dress, which should retain the heat generated within the body, he is emphatic about woollen underclothing. Corsets, as usual, are brought in for reprobation, the point being made, that "the less oxygen we inhale, the less heat can the body manufacture."

The use of the nostrils as a respirator is spoken of, but not with the detail that makes Catlin's monograph on "The Breath of Life," so curious and interesting.

We are to remember that "a few moments spent in a disagreeable atmosphere, are less dangerous than a draught of cold air," but with plentiful food and the clothing carefully adapted to the changes of temperature, in-door and out, so that the body is kept warm, a rough climate will be found bearable.

On the subject of bathing, he is very explicit. A full bath before breakfast, like exercise at that time, is injurious. The daily shower bath is "an invention of the devil." The proper time for bathing children is the forenoon, or about an hour before the evening meal. Some valuable instruction is given on the use of water in various ailments, but the author seems to have had some unlucky experiences with the Turkish bath.

Chapter IV. treats of pulmonary food, and contains among other things, a tirade against woollen carpets, which are charged with supplying dust and fibre for inhalation. And the author is eloquent upon the horrors of re-breathed air. As he has given us, page 47, the dismal lines of Sir Alfred Power on the inner skin, he may feel inclined in a second edition, to reprint the Ode to the Sexton, asking for ventilation in church. It was originally published in the *Knickerbocker*, and gives a graphic description of the terrible internal regions visited by the breath which is afterward "*fetched up again*" for another's using.

True to the interests of children, he points out that their mouths are lower than those of adults, and therefore, receive more of the heavier impurities allowed to defile the air of home.

Some space is devoted to the methods of introducing the outer air into houses without creating cold draughts, and a description is given of a wooden frame covered with stout cotton flannel and shut into the upper part of windows as mosquito bars are shut into the lower part in summer. This device is said to be used in Boston hospitals.

Enough has now been said, perhaps, to indicate the scope and character of this little treatise, and we will refer to the book itself, those who desire to know what the author has chosen to say on lighting, the enervation of overheating, the necessity of sunshine and proper exercise, the difficulties of obtaining the right temperature and pure air in schools, etc., etc.

He writes, with a vivacity of style that attracts the reader

and helps him through,—an important point where instruction of the public is attempted.

A series of essays like this, must be productive of good.

C. E. B.

OPHTHALMIC OUT-PATIENT PRACTICE. BY CHARLES HIGGENS, F. R. C. S., (Guy's Hospital), Second Edition. *Philadelphia. Lindsay & Blakiston*, 1879,

The author has succeeded in giving in this little volume (duodecimo) a clear and intelligible sketch of ophthalmological diagnosis and practice. In the eight sections whereof the contents of the book consist, he passes in his short and precise way systematically over nearly this entire branch of medicine, mentioning the chief points of diagnosis and differential diagnosis and recommending a very practical method of treatment. The style of the writer is clear and concise, and, therefore, he is able to treat so intelligibly on a few pages, (sec. vi and vii), the somewhat difficult subject of anomalies of refraction and accommodation. The book will prove to be a valuable one in the hands of students and also of general practitioners, who have not had the opportunity to devote some time to this specialty, but who, nevertheless, ought to be well acquainted with the outlines of this most important branch of medicine.

G.

BOOKS AND PAMPHLETS RECEIVED.

THE STUDENT'S GUIDE TO DISEASES OF THE EYE: By Edward Nettleship, F. R. C. S., Ophthalmic Surgeon to St. Thomas's Hospital. With eighty-nine illustrations. *Philadelphia: Henry C. Lea*, 1880. (Through the Hugh R. Hildreth Printing Co., St. Louis).

LECTURES ON PRACTICAL SURGERY: By H. H. Toland, M. D., Professor of Principles and Practice of Surgery and Clinical Surgery in Medical Department of the University of California. *Philadelphia: Lindsay and Blakiston*. 1879. (Through the Hugh R. Hildreth Printing Co., St. Louis.)

A MANUAL OF THE PRACTICE OF SURGERY: By W. Fairlie Clarke, M. A. and M. B., (Oxon), F. R. C. S., etc. From the last London Edition. Revised and Edited with additions by an American Surgeon. *New York: Wm. Wood & Co.* 1879. (Wood's Library of Standard Medical Authors.)

LECTURES ON THE DISEASES OF WOMEN delivered in Saint Bartholomew's Hospital. By J. Matthews Duncan, M. D., LL. D., F. R. S. E., etc. *Philadelphia: Henry C. Lea.* 1880. (Through the Hugh R. Hildreth Printing Co., St. Louis).

PHARMACOGRAPHIA. A History of the Principal Drugs of Vegetable Origin, met with in Great Britain and British India. By Friederich A. Flückiger, Phil. Dr. Professor in the University of Strassburg, and Daniel Hanbury, F. R. S., Fellow of the Linnean and Chemical Societies of London. Second Edition. *London: Macmillan & Co.* 1879. (Through the Hugh R. Hildreth Printing Co., St. Louis).

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA: The report of the State Board of Health. Thirty-second Session. 1879. *Montgomery, Ala.: Barrett & Brown,* State Printers.

PROCEEDINGS OF THE CONNECTICUT MEDICAL SOCIETY: 1879. Eighty-eighth Annual Convention. *Hartford Conn.: Press of The Case, Lockwood and Brainard Company.*

RESPONSIBILITY RESTRICTED BY INSANE DELUSIONS: By T. L. Wright, M. D., Bellefontaine, O. [Reprint from *Cincinnati Medical News*, Nov., 1879.]

A PROTEST AGAINST MEDDLESOME MIDWIFERY: By H. Gibbons, Sr., M. D. [Read before the San Francisco County Medical Society. Reprint from *The Pacific Medical and Surgical Journal*.]

FISTULE VÉSICO-URÉTHRO-VAGINALE, opérée par l'oblitération transversale du vagin. Par le Dr. V. Gautier de Genève. *Lausanne Imprimerie, L. Corbaz & Comp.* 1879.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL
SOCIETY.

Stated meeting, Dec. 18th, 1879. Dr. L. Ch. Boisliniere, President, in the chair.

DISCUSSION OF PAPER ON PUERPERAL FEVER BY DR. MAUGHS.¹

Dr. Coles.—In reference to one point in Dr. Maughs' paper, I will give the history of an epidemic which appeared in Bellevue Hospital, New York, when I was there in 1860. The first case that we had, was evidently of a traumatic character, a case that I happened to have under my care in the wards, in which Dr. Barker performed version, the membranes having been already ruptured. The patient was a large and healthy young woman. Three or four days after delivery, she complained of great tenderness in the abdomen, and was taken with metro-peritonitis, which terminated fatally. The uterus had been pressed upon a good deal externally, in an attempt to facilitate turning, and, owing to extension of the chin, great difficulty was experienced in delivery of the head, which required an amount of manipulation calculated to produce much local irritation. In the course of a week after that, another case occurred, and in rapid succession, for a period of a month or six weeks, it was really an exception for a woman to be delivered who was not taken with puerperal fever. My recollection is, that upwards of thirty women were attacked in a little over a month, nearly all dying. They were treated with *veratrum viride* and morphia. Vomiting was a very prominent symptom in these cases. The *veratrum* was used in full and frequent doses, as was the morphia. The hospital was in no specially unsanitary condition at that time, and the commencement of this epidemic confirms what Dr. Maughs has said, that puerperal fever may

1 Paper published in January number.

commence from no specific cause whatever, but may originate accidentally, and acquiring specific properties, light up an epidemic. In most of those cases you would find, on visiting a woman twelve hours after delivery, that her pulse was a good deal more frequent than it should be; some complained a little more than usual of after-pains; sometimes a patient lying still in bed, would suddenly scream, and complain of intense pain in the uterus, and this, after no extreme difficulty in labor, and with no clots in the uterus. But these were exceptional instances; most cases commenced with a characteristic, suspicious frequency of the pulse and elevated temperature. In other cases, where there was no marked puerperal fever, the disturbance of the system, on the first appearance of milk, was more than usual. There was scarcely a woman that escaped some complication.

Dr. Prewitt.—There is one point in Dr. Maughs' paper that I can hardly concur in, that is, that puerperal fever can arise from purely mental disturbances. I look upon puerperal fever as always a septic fever in some shape. It is a traumatic fever to all intents and purposes, and I do not see how a woman could have puerperal fever as the result of mental causes, any more than a man who has had a leg or an arm amputated, could have septic fever from the same cause. Dr. Coles lays a good deal of stress upon the fact that, in the epidemic which he related, in the first case it arose from a traumatic cause alone. I take it, that it is always in connection with a traumatic cause that the disease is brought about; that the traumatism furnishes an inlet to the poison, whatever it be, whether autogenetic, or heterogenetic, that it is to all intents and purposes a blood poison, whether we assume that it arises from erysipelas, scarlet fever, or whatever other cause. I think Dr. Maughs is right in saying that it is not always the same poison; but that a mere nervous state, a mere mental condition could produce a fever that we can call puerperal fever, I cannot conceive as possible. We may have, in any wound, a certain amount of fever from changes going on in the tissues that are injured, even in subcutaneous wounds; but it is not likely to reach such a degree as in those in which there is contact with the atmosphere and septic material gets into the blood.

Dr. Barrett.—No one who has had much experience in the treatment of women who fall into labor in states of depression,

can fail to see that complications are much more frequent in such cases, than in those that are not subject to such causes. I had considerable experience in a hospital in which most of the women were primiparæ, and almost all illegitimately pregnant, and the complications were much more frequent than among women who enjoyed easy mental conditions. In those instances in which women were educated and refined, and therefore felt their disgrace most keenly, complications were much more likely to arise, than among those who, being coarse and ignorant, were comparatively insensible to their degradation. And I can understand why such depression should increase the frequency of the disease. We know that mental impulses have a great deal to do with the functions of the uterus; and we can understand how if the nervous system is deeply perturbed, it may interfere very seriously with convalescence after parturition, and, from inducing a lowered condition of vitality, favor the production of septicæmia. With regard to the connection between erysipelas and puerperal fever, I will narrate the history of two patients at St. Luke's hospital. Two women who were pregnant, came to the hospital, and were placed in a room isolated from the rest of the house and which is generally used for the treatment of erysipelatos and cancer cases or others requiring isolation. No surgical case or case of erysipelas had been in this room for months. These patients were put in there prior to their confinement, and remained there two months together, and at the end of a certain time, one of them fell into labor. On the second day after labor, erysipelatos inflammation showed itself on the buttocks, extending from the buttocks around to the genitals, and through a slight wound in the vagina. I could trace it by speculum examination day by day into the cavity of the uterus. The woman had peritonitis, and died of blood poisoning. When this woman was taken with erysipelas, the other one who had been her companion, moved away to another institution, carrying with her, her trunk and clothes, which had probably been kept in the infected room. About a month or six weeks later, she was taken in labor. In this institution there was no septic influence present, nor had there been a case of puerperal fever for years, but she was taken with metritis, and died of embolic pneumonia, as the result, although she had an easy, rapid labor, and was a vigorous, well-devel-

oped girl, and there was no reason for apprehending any difficulty in her confinement. She had no cutaneous erysipelas.

Dr. Ford.—When I first heard Dr. Maughs' paper, I was strongly inclined to think that no case of puerperal fever begins without some traumatic lesion, without some laceration of the parts by which fluid more or less septic in character can gain entrance into the economy; but upon further thought, I am pretty well convinced, that the truth may be otherwise, and I will call the attention of the Society to the well known fact, which any one subject to chills and fever, and who has broken them by quinine, etc., knows, that as surely as he sits up of night, receives suddenly disagreeable intelligence, or is suddenly shocked in any way, just so surely will he have an attack of fever; I know this from experience. We must recollect that in the condition I speak of, chronic intermittent fever, the blood is surcharged with septic material, it is just as much as the system can do to sustain itself; there is a similar condition to that during labor; of course we know that where that condition exists, there is an abnormal excitement in every organ of the body, which shows itself in all the functions of the system. The blood is surcharged, the system is exhausted, there is a loss of resistance of the system to septic material, on account of great loss of blood, to which Dr. Maughs drew attention. There can be very little doubt, I think, that, in some cases where there is no laceration of the parts that we can recognize, there may be such a depression of the forces of the economy, coinciding with a general irritation of the whole system in an ataxic condition due to the labor, that mental conditions may give rise to the fever. We are all agreed that "puerperal fever" is a generic term of the greatest breadth. It implies diffused inflammation of the uterus consequent upon the direct introduction of toxic matter, or from erysipelas, or from some bad form of abscess, or by contagion from another woman, or, I suppose, in some cases only the lochia being extraordinarily fetid may give rise to something that runs into puerperal fever. Independently of external agencies, an inflammation of the uterus sometimes arises from the local formation of pus in the substance of the uterus, a phlebitis from putrefactive changes in the coagula contained within the sinuses, the uterus being in an atonic condition which is the predisposing cause of failure to contract. Loss

of blood, and a lack of nervous force are the most frequent predisposing causes. Then we have a local and a general peritonitis, which conditions have been well observed by Fordyce Barker.

Some forms of puerperal fever may be complicated with septicæmia, some with pyæmia. So that there are a variety of diseases classed under the name of puerperal fever. I would like to say one word in regard to the use of *veratrum viride*. Fordyce Barker is a well known champion of its use in these diseases. As far as my experience goes, I cannot see that it is of any particular advantage. I am obliged to say so, although I am a very ardent admirer of this drug. *Veratrum viride* is a conservator of the forces of the entire economy, by lowering the temperature. In idiopathic fevers, it is most valuable. But there must be nothing behind—there must be no purely local cause of blood infection, such as we have where the lymphatics are full of pus in the inflamed uterus, or where large thrombi are putrefying in the body of the uterus, or where peritoneal inflammation of a pyæmic origin has occurred. Under those circumstances it is impossible that *veratrum viride* can do any good, as the blood is continually absorbing the toxic matter. Where the interior of the uterus is at fault, where absorption takes place through a rent or fissure in the vagina, or through the walls of the uterus itself, a continued washing out of the cavity would be very useful, and I think the suggestion is a highly valuable one that has been made to this society by Dr. Barrett, that is, the almost continuous irrigation of the uterus.

Dr. S. G. Moses.—I agree in large measure with what has been said as to the character of puerperal fever. I think Dr. Ford's remark, that under this head a great variety of diseases are classed, is eminently true.

Dr. Boisliniere may recollect a case in which he and I were associated, the case of a young woman who was taken with violent puerperal mania during pregnancy, resulting in premature labor. This young woman had trouble commencing in the lung and the pleura occurring during the puerperal period, and she had a complication immediately, having all the characteristics of puerperal fever connected with this condition of the lung. We succeeded in carrying through the case successfully. At the same time with this case, there were two other cases;

one was the case of a young woman with her second child, who had a rapid labor without any apparent difficulty of any kind, getting on remarkably well until the third day, when she was taken with symptoms of so-called puerperal fever. I think that this was a case of simple peritonitis; it yielded rapidly to the usual treatment, and did not present the characteristics of a septicæmic case. I have fortunately not had a great deal of experience in puerperal fever, but the cases that have fallen to my lot have always come in groups. I recollect some years ago I attended two ladies; both of them were taken within twenty-four hours of each other, with symptoms of puerperal fever. One case was evidently septicæmic, and the ordinary means were made use of, but unsuccessfully—she died. The other case ran on with great rapidity—all of the symptoms of peritonitis occurring almost immediately, this case recovered. After attending these cases, I gave up obstetrics for several weeks, fearing that I might, in some way, carry and communicate the poison to other parties. The “epidemic,” of which Dr. Coles spoke, I do not think was an epidemic—it was an endemic, a local toxic influence prevailed. In 1835, in the hospital in Philadelphia, there was one room which had formerly been used for lying-in patients, and occasionally for surgical purposes. I do not know how the first case of puerperal fever occurred, but following it, every patient placed in the ward to be confined, was subject to the fever, almost invariably fatal. Finally they deserted the ward for that purpose, and had it thoroughly cleansed, the floors taken up, the walls repapered, and again the same attempt was made to use it for lying-in patients, with precisely the same results. Now this particular room was disconnected from the other portion of the building, so far as the surgical wards were concerned. There were only three wards, and this was in the center, finely ventilated, and persons occupying the other two rooms were convalescents. The house was remarkably cleanly, being taken care of by the “Friends” or “Quakers.” Again, the room was used for puerperal patients, and again the results were the same. Finally the room was entirely disused for that purpose, and a house built in the yard for lying-in patients, when the disease entirely disappeared during my residence there.

It is singular how persistent this toxic influence may be, and it reminds me of a disease with which we are all familiar, and

which we all dread—scarlet fever. We know how uncertain, and yet how persistent the contagium is. Scarlet fever may occur in a house and not a single person besides the patient have it, and six months afterwards, clothing, bedding, etc., may be carried from this house to another, and may become a focus for the spreading of the disease. I do not mean by this remark to identify the two diseases, for I doubt very much whether scarlet fever will produce puerperal fever. In my experience, I have several times had occasion to observe where children have had scarlet fever in the same apartment with puerperal patients, and have gone through all the stages, without the puerperal patients having suffered in the least from the influence of it. I do think, however, that in an atmosphere where erysipelas exists, it is extremely dangerous, to say the least, to expose puerperal patients to its influences. It has been observed constantly, that where erysipelas is epidemic, puerperal fever is pretty sure to occur. I do not think they are identical poisons. With regard to the treatment of puerperal fever, I do not think you can lay down any rule. There are cases ushered in with violent reaction, in which I think the lancet invaluable in the earlier stages. I have no experience with *veratrum viride* in the treatment of the disease, but I am rather inclined to agree with Dr. Ford in the view which he takes with regard to this remedy. In my hands it has been rather a disagreeable drug, and I never use it except with a great deal of anxiety and care.

I think in most of the forms of puerperal fever, quinine acts well in sustaining the system. I think that the general plan of treatment, washing out of the uterus, keeping the parts thoroughly clean, preventing as far as possible the introduction of septic matter through the uterine sinuses is most valuable, and yet I should feel very doubtful about the plan advanced by Dr. Barrett, of keeping up a constant irrigation of the uterine cavity. I think by washing out the uterus two or three times a day, perhaps more frequently, you gain all that can be gained by constant irrigation. Fortunately, not having had an extensive hospital practice, my experience of this disease has not been very great. I do not think it is very common in St. Louis, certainly not as frequent as it is in some of the Eastern and European cities. My practice has extended over a period of forty years, and perhaps I have seen from thirty to forty cases.

Dr. Coles asked if rigors usually ushered in the disease?

Dr. Moses said as a general rule, they do.

Dr. Barrett.—I would like to say one word in regard to my practice of the constant irrigation of the uterus. I have gone to a case in which there was high temperature, quick pulse, and hot, dry skin, washed out the uterus with an $1\frac{1}{2}$ per cent solution of carbolic acid, and seen the temperature fall two or three degrees, the pulse diminish in frequency, and all the symptoms of approaching tympanitis disappear in a few minutes. In one case, which was operated on for the extraction of a tumor, I satisfied myself as clearly as a man could, that washing out the uterus every half hour was *absolutely necessary*. I took my thermometer, and watched it again and again, and saw by her general aspect and by the rise in temperature, the heat of her pulse, and the clammy condition of her skin, that the patient would have died if the irrigation had not been kept up, night and day—showing the necessity of constant washing out, where there is a standing focus of absorption. I think the presence of a soft rubber tube in the uterus does no harm. I kept it in one woman eighteen or nineteen days without harm. By my method, you save yourself and the patient the annoyance of frequent manipulations.

Dr. Prewitt.—I want to say, Mr. President, that I do not mean to imply that mental depression would have no influence in favoring the production of puerperal fever, as a *predisposing* cause; but that it should be the exciting cause, is the point to which I took exception. I think mental depression may be a predisposing cause in puerperal fever, just as it may be in the case of a man whose leg or arm is broken, when mental depression may be a predisposing cause of inflammation by affecting the nutrition of the bone, and preventing union. As regards Dr. Ford's reference to the effect of mental depression in chills and fever, I agree with him perfectly, but I do not think that Dr. Ford, or any one else, would take the view that mental depression would *produce* the fever. In reference to the action of different poisons in producing puerperal fever, we all recognize the truth of what Dr. Maughs has said—that it is not always the same thing that we call puerperal fever. It may in one case be metritis, in another peritonitis, septicæmia in another, or pyæmia. Then as to the correlation of the different poisons in inducing puerperal fever, the uterus is lined with

mucous membrane; it is continuous with the membrane of the vagina, and there is no reason why erysipelas should not spread from the skin to the mucous membrane, and thence to the uterus. And I suspect that erysipelas is always traumatic; that in those cases where there is no wound perceptible, there is an abrasion of the skin through which the poison finds its way into the system. In this case, it would be erysipelas of the wound, with its effects upon the surrounding parts, but in the case of scarlet fever, I think it is somewhat different. I can conceive it possible that any organic animal matter in a state of decomposition might serve as the origin of a septic condition, but not the scarlet fever poison *per se*. That, I take it, can only produce scarlet fever in a patient who has not had scarlet fever. Nor do I think that small-pox would produce puerperal fever in a patient who had already had the disease previous to confinement. That some of the organic matter in a state of decomposition from a small-pox patient, might serve as a starting point, I will admit, but not the small-pox poison itself.

Dr. G. A. Moses.—It seems that all the gentlemen who have spoken, include under the term, puerperal fever, all the different inflammatory affections that affect the uterus or its annexes. *Dr. Barker* is very explicit in discriminating, (and I think wisely), between the different forms of inflammatory, pyæmic, and septicæmic diseases which follow puerperal conditions, and puerperal fever proper; he cites several cases to support the view which he takes, and which, I think, is tenable and reasonable, viz., that puerperal fever is a fever *sui generis*, and should be so defined, not depending upon any local inflammation. Of course all of these pathological conditions are accompanied by fever, but you may have puerperal fever without them, and post mortem examinations show no local lesions whatever, or so slight as to give no ground for the belief that the disease has had a local septic or pyæmic origin. I have been surprised that none of the gentlemen have discussed the subject from this point of view, but have included all under the general term of puerperal fever. My experience is not sufficient to afford me strong and unequivocal ground in support of the view, but I can recall one case in particular, in which, with a very severe attack of fever, there was not, at any time, peritonitis sufficient to be detected, and if there was any metritis, it was of a very mild character. The patient had a large collection of gas

in the intestines, and as soon as this was removed, there was no, or very little pain, although before the removal of the gas the pain had been intense. I agree entirely with Dr. Prewitt, that scarlet fever cannot produce anything but scarlet fever. Notwithstanding all the valuable discussions published of late, I can not see that scarlet fever can produce anything but scarlet fever, and so with diphtheria. Erysipelas may produce erysipelatous inflammation, which may go on to metritis, peritonitis—death; but still the disease is an erysipelatous inflammation, an affection entirely different in all its pathological conditions from what should be described as simple puerperal fever. As regards the local influences and causes of the disease, very many interesting facts might be adduced to show that there is what is called a nosocomial malaria. I attended in a hospital in which every patient put in a certain corner of the ward, had erysipelas, and it finally had to be abandoned. I think the irrigation plan adopted by Dr. Barrett is extremely valuable, and I concur with him, that in many cases it should be almost constant.

Dr. Ford.—Dr. Moses is mistaken in his assertion that all the gentlemen who have spoken upon the subject, include under the term “puerperal fever” a number of other affections, as I do not take that view. But I do differ from Dr. Barker in his view that there is such a thing as essential puerperal fever. Dr. Prewitt has also misunderstood me I think, since I do not consider mental depression as an efficient cause of puerperal fever. Dr. Moses, senior, has suggested that the disease may occur *before* delivery, and I fully agree with him.

Dr. Prewitt.—I would like to ask Dr. Ford if he means that the nervous state is an exciting cause, when a woman has, after parturition, an absorption of offensive lochia.

Dr. Ford.—No, I do not. In that case the absorption of the offensive material would be the exciting cause.

Dr. Coles.—I merely wish to remark that when we look at this subject of so called puerperal fever in a purely practical point of view, it presents two aspects: one relates to its clinical features, and the other to revelations in the *dead house* on *post mortem* examination. Unless our patient happens to die, we can never know with certainty the precise pathological condition with which we have had to deal. The absence of local symptoms by no means implies immunity from local com-

plications. I know it to be a fact that a woman may die of puerperal fever with no symptoms whatever denoting serious implication of the peritoneum, uterus, or its appendages, and yet, the autopsy reveal most extensive and intense local changes. Now, if such a case were so fortunate as to recover, leaving only clinical lights to guide us, it might be claimed that this was a case of simple and pure puerperal fever *per se*, the tympanitis etc., being attributed to functional causes. But I cannot say that I have ever yet witnessed a post mortem in a puerperal fever case where there was entire freedom from perceptible local pathological changes. The puerperal state is, of course, a most favorable condition for the introduction of specific contagion, whether that be from without or from within. All that is necessary is for a puerperal woman to be subjected to its influence. But the character of the symptoms may vary even in the same epidemic, for, as I have already mentioned in the epidemic which occurred at Bellevue Hospital, the first case, although probably of traumatic origin, gave rise to a specific contagion, which, like diphtheria or yellow fever, manifested itself with varying malignity and varying local symptoms in different subjects, yet all these varieties sprang originally from one common stock.

I asked Dr. Moses about the occurrence of rigors in his case, because, according to my experience, this is a symptom by no means as common as many authors would lead us to suppose. I think, however, that the presence of a chill in the beginning of such attacks, more frequently than otherwise, denotes an inflammatory or traumatic origin, and, unless I am in error in this respect, is a useful guide in determining the nature of the exciting cause, especially in sporadic cases.

Dr. Engelmann.—With regard to the infection due to scarlet fever and small-pox, I should like to mention two cases that were very striking, which occurred in my experience of puerperal fever in hospital practice, where we know little or nothing of the previous history of cases. The two cases to which I refer, tend to show that that poison does not produce puerperal fever. One case was that of a woman who had the small-pox and was delivered of a seven months fetus, which, strange to say, bore clearly all the small-pox marks. The patient herself did very well and recovered without any signs of puerperal fever. The other case was that of a patient with scarlet fever,

a girl at full term, who, moreover, was one of those liable to nervous impressions. She nursed in a family where there was scarlet fever, three children having it, and when her labor pains began on a stormy, sleety, winter's night, she was moved to the hospital in the height of her scarlet fever. She bore a healthy child and recovered without any symptoms whatever of puerperal fever. I have never seen, to my positive knowledge, that small-pox or scarlet fever will produce puerperal fever in a lying-in woman. One more point that has been discussed this evening was with regard to the use of *veratrum viride*. I know it is a great deal used here, but I can only second Dr. Moses' remarks that I have always been a little afraid to use it. I have no experience whether it is beneficial or not, but I have seen several cases in the interior of the state where *veratrum viride* had been used, and I think with the most damaging effect.

Dr. Gehrung.—The influence of depression of the mind may probably be more easily understood, if we look at the frequency with which we find suppression of certain secretions, as for instance, the lacteal secretion, suppression of menstruation, and similar processes, from this cause. This suppression, as I understand it, is not merely an arrest of a secretion or excretion, but some may be absorbed into the sinuses, or carried into the system, if it is simply from an arrest of the lochial discharge. This, if there is anything impure in the discharge, may start a septic fever, and this may induce a puerperal fever.

Dr. Maughs.—Although scarlet fever is a specific poison, and as such always begets itself, I can readily see how it may induce puerperal fever. For scarlet fever is a zymotic disease, and all zymotic diseases are fermentative, and all fermentative diseases are putrescent diseases. In a puerperal woman, the physiological condition of the blood so closely verges upon the pathological state, that a zymotic poison being introduced, might very easily set up a fermentative condition of the blood, resulting in septicæmia. Erysipelas occurring in a puerperal fever, is not erysipelas at all. You might have it occurring in a thousand puerperal patients, but not as erysipelas proper. I have seen a hundred cases of puerperal fever produced by erysipelas, and there never was any appearance of erysipelas in any one of them. It was septicæmia, produced by the zymotic influence of erysipelas on the genital tract. Dr. Barker's theory is

universally rejected, and his is the only notable instance of advocacy of that view. When he advocated it in the London Obstetrical Society, there was not a single soul in the society who agreed with him. In the cases to which Dr. Coles referred, of patients dying without local lesions, it may have had an appearance that it was an essential disease, but it was only an appearance.

Dr. Ford.—I merely wish to define my position as regards the relation between scarlet fever and these septic conditions with fevers of an ataxic type, that occur during parturition. There may be, in many cases, a direct transference of the scarlatinal poison to a parturient woman. I do not mean to say that there is any reproduction in the constitution of a parturient woman of the scarlatinal condition, that there is an identity between the disease as existing in a patient from whom the scarlatinal poison has been derived, and the condition induced by it in what we call puerperal fever, in the woman who has been attacked by it. As I said, there are many cases in which the scarlatinal poison is directly transferred to a parturient woman. We examine the nares of patients suffering from scarlet fever; we see abscesses in the throat; we get the exudations from the nose upon our hands, and it is easy to see how matters of that kind, when taken upon the hand and carried into the genitals of a woman who has been lately delivered, and whose system is already disposed towards fever, may induce a septicæmic or pyæmic condition.

Dr. G. A. Moses.—I agree entirely with Dr. Ford in that position; so much so, that I do not think one should attend a case of midwifery who has been attending a case of scarlet fever, or other septic disease.

Dr. Ford.—In a surgical sense, we have no right to consider erysipelas as anything more than a diffused, non-limited, non-reacting form of inflammation, which pervades all the tissues, and if pus formed by this inflammation is introduced into the system of a parturient woman, it will favor the production of a similar condition in the fluids of her system. There is no relationship between scarlet fever and erysipelas, erysipelas being a local disease, while scarlatina is a general disease.

Dr. Boisliniere.—I would recommend that in such cases of "transference of erysipelas," patients be treated in the same way as you would treat erysipelas.

MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, August, 1879.

CHRY SOPHANIC ACID IN PSORIASIS.

Dr. Hardaway.—I wish to exhibit to you this young gentleman whom I have been treating for a diffuse psoriasis. The remedy employed by me was chrysophanic acid, and the result, so far as dissipation of the eruption is concerned, has been truly remarkable. You will observe on this patient numerous dead white patches, surrounded by areas of dark, brown looking skin; but on close inspection, you will note that these spots are destitute of scales, and entirely supple and smooth to the touch. This abnormal coloration will shortly disappear, leaving the integument normal in appearance. The rapidity of effect obtained by the chrysophanic acid treatment, as compared with former methods, is interesting; a week, under this remedy will accomplish more, as a rule, than a month's persevering use of other drugs, whether locally or constitutionally administered, or both combined. I should like to say in regard to this drug, that it is a powerful stimulant to the skin, and therefore, must be used cautiously, and not over too large a surface at one time, as you may get up intense erysipelatous inflammation of the surrounding healthy skin by its injudicious application. I believe that in the majority of cases an ointment of from 15–30 grs. to the ounce, is sufficiently strong. In passing, it may be said that chrysophanic acid is an effectual local application in all parasitic affections, and has proved very serviceable in lupus. Great care should be taken, if indeed it is at all safe, in applying the acid in the neighborhood of the genitals and about the face, as it is apt to cause marked edema in these parts.

The chief objection to the drug is its bad quality of staining the skin, dying the hair, and utterly ruining underclothing and bed linen, but these various inconveniences may be avoided with a little care.

Dr. Prewitt.—That is a very interesting case, especially in view of the success of the treatment. Psoriasis is a symmetrical disease, and Paget has laid it down as a rule, that all symmetrical diseases are blood diseases, and why a local application should cure a disease of that kind, is surprising; but that it should be beneficial is not. I have always given these cases constitutional treatment as well, and I find that they yield quite readily, although not as promptly as this one has done. I do not suppose chrysophanic acid has any specific properties, merely improving the local nutrition of the part, as do the tarry and other stimulating applications formerly recommended. The history of psoriasis shows that it returns sooner or later in all cases, and if it can be proved that this new method of treatment permanently removes the disease, the acid should be considered a very marvelous agent. For my part, I scarcely believe that psoriasis is an affection that can be eradicated by merely local means.

Dr. Hardaway.—I make no such claim for chrysophanic acid. The disease will as surely relapse after its use as after the use of other drugs. I claim merely for chrysophanic acid, that it will remove the local trouble more rapidly than any other remedies at our command. Again, psoriasis will relapse after the most rigorous constitutional treatment. If arsenic, or any other so-called constitutional specific for psoriasis, alone or combined with local treatment, would cure the disease more rapidly, or cause fewer relapses, than under a purely local treatment, I should say by all means use such measures; but such does not seem to be the case—the recurrences seem to be as frequent as when local remedies only are applied. Then why plague a patient with internal medication for the sake of a theory, whether true or false it matters little, if the results do not square with the hypothesis?

Stated Meeting, September 12, 1879. Dr. Ford in the Chair.

A NEW TYPE OF FEVER.

Dr. Carson referred to a case occurring in his practice, having the following characteristics: "There was little or no disturbance of the intestinal canal, no coating of the tongue, but a very high temperature with low pulse, which did not yield to quinine readily. A physician with whom he had talked in the

country, said that he had met with several such cases, in which there was very little derangement of the intestinal canal, the tongue was sometimes coated, appetite sometimes lost, sometimes not, and with a very little increase of the pulse, the temperature ranged from 104° to 105° and over. This condition lasted in spite of quinine for about three weeks. These cases occurred about Renick Station, Mo., in a high country, during the last few weeks.

Dr. Prewitt.—I have three cases on hand now of the same type of fever. They have all recovered but one. There were no enteric symptoms. The case I have now on hand has been sick about four weeks. About the third week I thought he was convalescent; his appetite was improving, and on Saturday he had a ravenous appetite and eat very heartily. Next day he had high fever again, and to-day his temperature is coming down to about $101\frac{3}{5}^{\circ}$. He does not eat very much, but he eats three meals a day right along. His tongue has been clear from the beginning. I have been obliged to move his bowels occasionally. He is twenty-one years of age. Of course, there is a little variation in the morning and afternoon. In the first week the variation is not great, after that the variation is greater.

Dr. Ford.—I would like to know the general impression of the gentlemen present with regard to the prevalence of fevers this summer.

Dr. Prewitt.—They have not been as prevalent this summer as they were last.

Dr. Moses.—Judging from my private and hospital practice, I should say there had been very little fever this year.

Dr. Prewitt.—Another thing I observed about these cases is that there has always been a little bronchial irritation.

Dr. Ford.—Any pain in the back and limbs?

Dr. Prewitt.—No, sir. They sleep well and there is no eruption, no typhoid symptoms whatever. No sordes, no dry tongue, diarrhea, nor tympanitis, nothing but the high temperature. They are emaciated considerably, not so much as they would be in typhoid fever. I venture to say that four-fifths of the physicians getting cases of this kind and examining the pulse, would think the patient was a great deal better, yet the thermometer with that condition, will range up around 103° and 104° .

Dr. Nelson.—I have seen one case, that of a child about ten years old, that corresponds to those which Dr. Prewitt has described, though in this case there has been a slight tendency to diarrhea, which, however, has not required medicine to control it. In the first week, the temperature ranged between 103° and 105° constantly; quinine did not seem to have any effect in reducing it. In the second week, it seemed to be more remittent, and this week there have been two or three times in which it has been entirely intermittent. There has been the same bronchial irritation you speak of.

Dr. Prewitt.—Dr. Scott told me to-day, he had a case of the same kind in which the temperature every morning is 103° . In his case this is the second, verging on the third week.

Dr. Ford.—Was there any evidence of chills?

Dr. Prewitt.—No chill. There were some premonitory symptoms I infer, because, in the case of the young man who is now under my care, he had complained somewhat of headache for some days before he was taken down, and yet he was not sick. He came to my office on Monday evening and I found him with a temperature of 104° , but no coating of the tongue; his pulse not over 80 or 84. I suspected then that I had a case of this kind. I prescribed for him and remarked to his father that I thought very likely he would be sick for some days. I gave him, I think, 40 grains of quinine to be taken in six-grain doses. I saw him again on Wednesday morning, and found it had made not the slightest impression, his temperature still being 104° and his pulse 80, and in the afternoon the temperature 105° and it ranged that way for a week or ten days.

I think most of the cases have complained a little of some malaise beforehand. I have given quinine liberally—40, 50, 60, and 70 grains of quinine in a day. In the first place, I felt very uneasy about the high temperature every night, and gave quinine with the purpose of controlling it. In one of the cases in which I gave 70 grains of quinine in a day, it did seem to control the temperature, but upon stopping the quinine it rose to its former standard. I was somewhat amused about a case which I saw last year. The father of the patient, a young man, suggested that some one see him with me; I said, “certainly.” Dr. Lankford saw the case, and after examining it, he said, “I think quinine is the remedy in this case.” I told him I thought so too, and that the patient had been taking from 60 to 70 grains

a day, and we gave it again. We tried salicine, but it did not produce any effect; five-grain doses every three hours, perhaps; whilst, when we gave quinine in ten-grain doses, it seemed to reduce the temperature.

Dr. Briggs.—What was the condition of the head?

Dr. Prewitt.—Well, they did not complain much.

Dr. Nelson.—Do you think that, in the case of patients who are in reduced circumstances, the advantage derived from the quinine is sufficient to warrant the expense of it?

Dr. Prewitt.—No, I do not. In the first case I ever saw, some three years ago, it did not seem to control it; the disease ran its course of about three weeks. And in the case of the young man I spoke of as having a relapse, I gave him quinine for several days after his relapse, but for some time he has taken none whatever, and he seems to do just as well without it.

Dr. Ford.—Those cases seem to be very similar to two cases that occurred in Philadelphia last year. One of them was the daughter of our Health Commissioner here, and I think the other was his sister; both of the ladies died. The elder had been suffering from some form of intermittent fever. She moved back to Philadelphia, and entered a house which had been vacant for some six weeks, perhaps two months, and the whole course of her disease was changed. She got a slow fever, which lasted, I think, about two weeks, and the daughter who was at her bedside constantly, also died. In both cases the disease lasted about six weeks. The house was afterwards examined, and it was found that the whole disease originated in sewer gas.

ENLARGED CLITORIS—RUDIMENTARY VAGINA.

Dr. Carson.—Some three weeks ago I had a case, which may be of some interest to the Society. A woman with a well-developed child about five years of age, came to me and said there was something the matter with the child's vagina. Upon examination I found a clitoris about one inch in length, and upon each side a large prominence which I thought might be testes, but which upon examination, proved to be nothing other than a prominence caused by an excessive supply of adipose tissue. Raising the clitoris, I found it hung between the thighs covering a small opening about the size of the head of a large pin. I could pass a probe about an inch downwards, and by

curving the probe, it entered a distance of about one and a half or two inches downwards and backwards, showing a rudimentary vagina to be present.

The mother asked my advice with regard to an operation. Of course I advised against it. She wished to know if the child was an hermaphrodite, I told her that it was what is usually termed an hermaphrodite, but there was nothing more than an excessive developement of the clitoris. The prominences on each side of the clitoris were very marked, and looked as if they might contain testes, but were nothing more than adipose tissue. The opening extended from that small opening, which was no larger than the head of a pin to the anus. There was a little opening at the end of the clitoris, which appeared to be very much like an opening into the urethra, but, in attempting to pass the probe, I found it was merely a blind sac. There were also folds of skin which seemed to give it the appearance of the penis exposed. On the whole it presented very much the appearance of a penis. On examination I found the opening into the bladder back behind the clitoris in the natural site, may be a little further advanced.

Dr. G. A. Moses.—I have never seen but one case of the kind. So much depends upon the development of the child, and the development of the parts, that it is hard to give a general rule by which to treat such cases. If there be a properly developed vaginal canal above the occlusion, if the occlusion appear to be simply a partial one, or an exaggeration of the hymen, I think it just as well to let it alone until development is completed. I do not see any reason for hastening the operation. After development has progressed beyond the period of childhood, we can then judge pretty well as to the amount of deformity that exists, and can operate with much more intelligence, whilst if, we operate too early, it may be necessary to repeat the operation at a later time.

Dr. Ford.—I agree with you. But the advice is very often given to let these cases alone until menstruation has occurred, while probably it has always to be done before menstruation occurs.

Dr. Moses.—I think we should wait at least until the approach of maturity. In early life, it is impossible to make a thorough examination of the parts; you cannot tell the size and position

of the genital organs, and it would be operating entirely in the dark as to the future.

Dr. Carson.—In this case, the vagina was not imperforate. There was an opening leading into the rudimentary vagina, and I took it to be more than probable that there was to be no menstrual flow.

Dr. Ford.—If there is a uterus, there must always be a menstrual flow, no matter how ill-formed the vagina may be.

Dr. Moses.—Dr. Ford has made a statement, that if there be a uterus, there must be a menstrual flow, which recalls to my mind two cases. A few days ago a gentleman who had been married about eighteen months or two years, brought his wife to me. She was a well developed woman, about twenty-five years old. She had never menstruated in her life. She had a perfectly formed vagina, and so far as the examination went, the uterus was perfect. I did not explore the cavity, because it was not convenient for me to do so at the time. She had never had any menstrual discomfort. She had well-formed mammae and was an extremely well-formed woman externally.

That was a case of absolute amenorrhea. Occasionally, in what is known as infantile uterus, we find scarcely any menstruation.

Dr. Ford.—All I meant to imply was, that the exception to menstruation in anomalous cases is not more frequent in proportion than in normal cases, that it must be taken for granted that there will be a flow from the uterus, and that if there is any impediment to the passage externally, of course it will give rise to severe symptoms when an attempt is made to open it.

Dr. Prewitt.—In cases where there is an imperforate hymen, it would be better to make an opening. Such cases are likely to be put off until the patient commences to menstruate and suffer from the consequences of the suppression of the menstrual flow. It seems to me that where there is an imperforate hymen, it is better to make an opening whenever it is discovered. Of course if there be an occluded vagina, this would be a difficult thing to accomplish, and, as Dr. Moses suggests, there might be such imperfect development that menstruation would not occur at all. So it would be better to wait until adult life.

Dr. Moses.—The only difficulty is to decide early in life whether it is simply an imperforate hymen.

CEPHALHEMATOMA.

Dr. Moses.—I saw this afternoon, a negro child about three years old, that has had an interesting medical history. It is perfectly black and the mother is blacker, if possible. I attended the child some two years ago for some cerebral trouble, when it was in a condition almost of coma for several days. It has a peculiarly formed head. The line of the sutures is very prominent. Two years ago it fell from a chair and sustained a fracture of the femur. It was then just beginning to toddle about. As a result of this fracture, it crawled for about a year longer, and during that time the extremities of the bones of the forearm became enormously developed. The mother says that about two or three weeks ago, the child had a bump on the head about the size of a hen's egg. She took the child to a physician in the neighborhood, who considered it an abscess and lanced it. Nothing came but blood. Very soon afterwards this swelling began to increase, and the child was taken to Dr. Gregory. He simply advised that the child be let alone. The child afterwards came under my care. I took it to be an hematocele, which had extended until the whole of the scalp was entirely dissected up. The scalp seems to be perfectly loose, and at several points I can feel the bony skull through this mass.

There has been no pain upon handling the head, no pulsation, no history of a blow.

Dr. Hardaway.—There is a condition which my friends, the surgeons, are very apt to mistake. Sometimes, over a surface as large as the palm of my hand, the hair will fall off, the scalp will very suddenly become swollen, with every appearance of an abscess, and sometimes in pressing the finger into this, you will find a well marked ridge upon the surface. It is the most deceptive thing in the world. It is simply an exaggerated ring-worm. I mention it because the tendency to put the knife into it is almost too strong among surgeons. There is no pus there at all. If you examine it closely you will find a glutinous substance oozing out of the scalp. It is simply an exaggerated tinea tonsurans.

Dr. Prewitt.—I have seen several cases of that kind, but I have never seen such a one as Dr. Hardaway describes, with a ridge on the border which would simulate a hematoma.

In Dr. Moses' patient there has probably been some rupture by a blow, and the blood has been oozing out ever since.

Dr. Moses.—I think there must have been a blow originally. The scalp is perfectly loose, you can move it all about. Tip the child over, and it will fluctuate perceptibly.

Dr. Ford.—Very considerable hemorrhage may occur in that part from slight injury. I remember a woman who had had a slight falling out with the husband. He caught her by the arms, she fell over on the floor, and his knee struck her heavily. There was a very considerable effusion of blood, I suppose not less than two quarts, within a short time within the abdominal cavity. She fainted and remained with all the symptoms of internal hemorrhage and recovered very slowly. By changing her position I could see the tumor move. No Peritonitis.

LABIO-GLOSSO-PHARYNGEAL PARALYSIS.

Dr. Bauduy.—My friend, Dr. Glasgow, has alluded to a case in which the patient, a lady, æt. 60, was unable to talk or protrude the tongue. There was very decided furrowing of the tongue, accompanied by vermicular movements. These conditions of the tongue plainly pointed to an involvement of the hypoglossal nerve. In addition to the lingual paralysis, there also existed a paralysis of the orbicularis oris, which, of course, favored the dripping of saliva, with inability to whistle, blow out a candle, suck or kiss. There was also some involvement of the glosso-pharyngeal. She is liable to attacks of strangulation, the dysphagia is so great that she is compelled to live almost entirely on liquids, or take her food very finely minced, and even then she has attacks of choking, making her sustenance a matter of great gravity. Another complication, so far as the pathology and symptomatology are concerned, is a well-marked progressive atrophy. Usually, in such cases, there is no involvement of the anterior spinal cornua, the disease being strictly bulbar. Recent writers, however, claim that a degeneration of the trophic nerve cells of this vicinity, is not a very infrequent complication, resulting in more or less muscular atrophy. Such a condition is well developed on the left side of her body, and involves many of the voluntary muscles, and produces the most characteristic "*main en griffe*" I ever witnessed. The thenar and hypothenar eminences

ces on that side have entirely disappeared with corresponding atrophy of the interossei muscles. Weakness on the left side of the body is thus produced, so that she stumbles and falls very readily. There is also involvement of the sterno-cleido-mastoid, and the trapezius muscles, thus pointing to muscular degeneration of the spinal accessory. There is no evidence of aphasia, agraphia, nor amnesia. She writes with perfect facility, having little tablets, by means of which she is accustomed to express her ideas, and converse most intelligently. When she is impatient, or desirous of expressing herself, she makes use of certain inarticulate sounds, which have a meaning to those of her family constantly with her, but which I am totally unable to comprehend. I have never heard her successfully attempt to articulate a single word. The absence of aphasia and agraphia prove conclusively the bulbar origin of the affection. There is bulbar degeneration of the nuclear origin of certain nerve cells of the fourth ventricle. The only relief which she received at any time, was from Faradization of the tongue, and that was only temporary, while under the care of Dr. Glasgow, who kindly referred the case to me.

Dr. Ford.—I was led to think of a case pointing to the traumatic origin of diabetes. Early in life he had a fall from which he suffered and was obliged to give up his trade. Diabetes developed, and along with the diabetes there has been a considerable salivation, a complication which is of frequent occurrence in these cases.

Dr. Bauduy.—Jaccoud, in his classification of the etiology of diabetes, speaks of one cause as being due to encephalic lesions of bulbar origin, also lesions of the spinal cord, especially in the dorso-lumbar region. Traumatic influences acting directly or indirectly upon the brain are powerful causes according to him of glycosuria, but do not cause a veritable diabetes.

HEMORRHAGE FROM THE GUMS.

Talking of diseases of the mouth, I had a case last week which puzzles me very much. This person was anemic and had some edema of the lower extremities, the result of valvular disease of the heart; but no anasarca existed.

He had a pale, pasty complexion which is very characteristic of some organic disease of the kidneys, but I have never been able to find any casts or renal epithelium, although the urine

contained albumen. This young man was really bleeding to death from a flow of blood which seemed to well up from one of his lower incisor teeth. For this I tried various styptics, but without the desired result, and the patient became weaker and weaker. He had been attended by a physician who used a good deal of mercury, but there was no marked salivation. One morning, finding that he was actually dying of hemorrhage, I sent out for a stick of lunar caustic, and forced the point between these two incisors and held it for a few minutes with the effect of controlling the hemorrhage, and ever since then, whenever the bleeding would commence again, I have had no difficulty whatever in controlling the hemorrhage in the same way. Now, whether the bleeding is due to a general diathetic condition I am unable to say; but he had no symptoms that would point to hemorrhagic diathesis. It struck me as a rather anomalous condition. I would like to know whether any other gentlemen have had a similar experience, and what in their opinion this hemorrhage was due to. There had been no injury, no fall, no blow. He has never had any febrile exacerbation that I could discover.

Dr. Ford.—Any scurvy?

Dr. Bauduy.—None that I could discover. He was a well nourished man and had not been living on salt meat, in fact, his gums presented no scorbutic appearance.

Dr. Robinson.—I have seen a somewhat similar case to Dr. Bauduy's, having all the symptoms and general appearances of scurvy in a young man having the best of diet. He had a great feeling of lassitude and pain in the back, indisposition for any effort whatever, could scarcely walk two or three squares without a great sense of fatigue. His gums are spongy and his tongue and lips are covered with aphthous patches. Now, I could not make out what could possibly be the cause of such a condition. I put him on muriated tincture of iron, vegetable acids, etc., and he improved somewhat, but he improved so slowly and his case progressed so unsatisfactorily that I advised him to go away, which he has done, and with excellent result. It must be due to some malcondition of the blood, undoubtedly. There was no history of any venereal disease.

Dr. Prewitt.—We have hemorrhagic cases with ecchymotic spots over the body, though in the cases I have seen, there is

none of this spongy purplish condition of the gums that you see in scurvy. I have seen several cases of that kind where there certainly was no scurvy.

Dr. Bauduy.—In purpura hemorrhagica the diathetic conditions are generally unmistakable. You have particular eruptions, in the first place; you have hemorrhages under the skin, you have hemorrhages from the slightest injury. I remember Dr. Boisliniere had a case in which he tried every means, and Dr. Pope actually applied a red hot iron without effect.

Dr. Ford.—I have seen cases of scurvy where it could not possibly be attributed to salt meat alone—where the parties used fresh meat and corn bread. A few days ago a gentleman told me that some twenty-five years ago, when he moved to California, in crossing the plains, he subsisted for eight days on game, and corn bread, and that when he got half way across, he found the fauces and gums were very much affected and began to bleed; his teeth were loosened; he even pulled out one or two with his fingers. He then sent for sugar, coffee and limes to a neighboring Mexican ranche, and subsequently recovered.

Dr. Moses.—Did you see a very interesting statement by Davis, the Arctic explorer, that notwithstanding the fact that his crew were confined to salt meat for a long time, there was not a single case of scurvy among them?

Dr. Ford.—They took plenty of cranberries, coffee, and so forth.

Dr. Moses.—Everything of that sort had given out.

Dr. Robinson.—Dr. Bauduy's case and Dr. Ford's suggestion, as to the propriety of examining the urine, recall to my mind a very interesting case that I saw about two years ago at a clinic, at the City Hospital, that of a man who had received an injury from a brick falling upon him from a scaffolding, and striking him between the shoulders. He was knocked down and remained insensible for about half an hour, but after recovering from the immediate effect he went about his business, and was active and on duty for about two weeks, at the end of which time he commenced to have some feeling of numbness in the lower limbs. At the same time, their power became less and less, but before complete paralysis took place, his upper extremities began to manifest the same sensations, and finally became paralyzed. Then the whole of his face

gradually became paralyzed, until his face was exactly like a mask, without any mobility whatever. When he first came to the hospital he was perfectly helpless, and presented the appearance of a corpse. I suppose there had been an inflammatory action caused by injury to the spinal cord, traveling upwards, and the floor of the fourth ventricle was affected probably, and I suggested the propriety of examining the urine. Dr. Dean examined the urine himself, and found sugar, which confirmed my position that the fourth ventricle was affected. The man remained in the hospital for some time. One side of his face began to improve, on the use of electricity, then the other, then the upper extremities, and finally the lower extremities, and when I last saw him he was in a fair way to complete recovery.

But the interesting point, I think, was finding sugar in the urine, in assisting to locate the seat of the lesion.

We did not use electricity until we supposed the inflammatory action had ceased. When I first saw him there was some elevation of temperature which gradually diminished.

MEETING OF THE MADISON CO. (ILLS.) MEDICAL SOCIETY.

The Society met in the hall of the Alpha Zeta Society, Shurtleff College, Upper Alton, Ills., Tuesday, January 27th, at 10 A. M. Among the members present we noticed Drs. Wadsworth and Powell, Collinsville; Dr. Fiegenbaum, of Edwardsville; Dr. Weidman, of Marine; Dr. Youree, Venice; Dr. E. W. Reid, Bethalto; Drs. Hardy, Gulick, and Smith, of Alton; Drs. E. C. Lemen, T. P. Yerkes, Hodge, James, Wilson, Burnap, and Humbert, of Upper Alton; Drs. Worden and Halliburton, North Alton.

Dr. Wadsworth, of Collinsville, presided gracefully and efficiently. Dr. Burnap, of Upper Alton, occupied the Secretary's table.

The morning session, after organization and regular society business, was principally occupied by Doctor F. Humbert with a paper on "the introduction of food and medicine when the

ordinary channel is obstructed." Dr. H. cited many cases of starvation among the insane, because of refusal to swallow, and referred to difficulty of giving food and medicine in cases of tetanus and hydrophobia. His idea (his paper elaborated this fully and included reports of many cases of successful application) was to introduce the food in a liquid form, or medicine, in small quantities through the nostril. The head being thrown backward, the food introduced into the nostril from a teaspoon, gravity carries it along the posterior wall of fauces, and it enters the stomach *nolens volens*. The discussion of the paper was participated in by Drs. Lemen, Hardy, Youree, Gulick and Wilson. As the discussion continued, the subject widened, and many interesting observations were given upon rectal alimentation and medication per rectum, and by absorption through the skin.

The subject of alimentation being exhausted, the Association adjourned, and repaired in a body to the elegant residence of Dr. E. C. Lemen, where something tangible in the way of aliment was served up, the joint production of the resident members of the Society in Upper Alton, or rather their wives, and a splendid production it was—a spread sufficient to tempt the veriest epicure in Christendom.

Prior to the onslaught of the doctors, the tables truly groaned, but after, deponent knows of at least one doctor, who took up the groan where the table left it.

At the afternoon session, papers were read as follows: "Medical Ethics," Dr. A. M. Powell, Collinsville; "Poisoning by Morphia," Dr. E. C. Lemen, Upper Alton; "Rheumatism," Dr. E. M. Reid, Bethalto; "Poisoning by Strychnia," "Lithotomy—a calculus weighing twenty-two ounces," Dr. T. P. Yerkes, Upper Alton. The papers were all discussed in an interesting manner, all the members participating. Your reporter regrets very much that lack of space prevents his giving a synopsis of the papers, and the discussions which followed, for they were extremely interesting and creditable; and in this connection he will add that he considers the day spent in attendance upon the Madison Co. Med. Society as time well invested. Just previous to adjournment Dr. Yerkes paid an eloquent and touching tribute to the memory of Dr. C. A. Glass, late of Upper Alton, who gave his life that others might live in the late epidemic of yellow fever in the South.

Adjourned at 5 P. M. to meet three months later in Edwardsville, Ills.

At 8 P. M. Dr. J. K. Bauduy, of St. Louis, Mo., delivered a popular lecture upon "Insanity" in the Presbyterian Church to a large audience.

L.

SELECTIONS.

DOUBLE PNEUMONIA AND ABORTION.

L. C. RUTHERFORD, M. D., of Macon, Georgia reports the following interesting case :

March 11th, he was called with another physician to see a patient, a white woman, aged 33, whom he found in the following condition: "Skin very hot, both cheeks flushed, eyes suffused, respiration about 23, pulse 120. Complained of severe pain in both sides of the chest. Cough constant. Both sides dull on percussion, right side more involved. Respiratory murmur at upper part of both lungs very loud, some fine crepitation. Tongue very broad and flat, deeply furrowed in centre, base covered with a dense, dirty, brownish fur, lips red, breath very offensive."

The diagnosis was double pneumonia. He ordered a large mush poultice as hot as she could bear it, to cover both sides of chest, acetate of ammonia, one dram every three hours, and dextro-quinine, five grains every six hours. At eleven a. m. the next day the pulse was 120, and all the symptoms were aggravated, temperature $103\frac{1}{2}^{\circ}$. Continued the use of poultice and increased the dose of dextro-quinine to twelve grains at once, the same to be repeated in four hours. At nine p. m., when he saw her again, she complained of diarrhea. Three doses of dextro-quinine were taken and the symptoms were much improved. For the diarrhea, a few drops of Monsel's solution of iron were ordered every hour. Nourishment, principally milk. Dextro-quinine was given twice during the night. On the following morning the symptoms were much

improved. During the next two days the acetate of ammonia was continued in one-drachm doses every four hours, with dextro-quinine five grains three times a day.

On the 15th, he was called in haste to see her. Found pulse 135, respiration very rapid, skin very hot, two slight convulsions came on while he was with her. Ordered beef tea and milk to be given frequently in small quantities, tinct. veratrum in small doses every hour. At four o'clock found her suffering labor pains. She was four months advanced. On vaginal examination the os was found dilated, the perineum soft and yielding, hemorrhage slight, and soon the fetus was expelled without the placenta. Following this abortion, she became semi-comatose, the pulse went up to 150, small and thready, the breathing became diaphragmatic. Convulsions followed, increasing in severity. The face was pale, skin of the body intensely hot, while the extremities were cold. The case was urgent. Having implicit faith in dextro-quinine, the doctor poured out what he "thought to be a good twenty-grain dose of that drug," which was dissolved in a solution of tartaric acid, and poured down her throat. This was repeated in an hour. It was certainly marvelous to witness the effects produced. In two hours the pulse was reduced forty beats, and the skin was much cooler. Though the convulsions did not entirely subside in that time, they were very much lessened. In three hours more, he gave her ten grains again; by night she recovered her senses. Next day he found, to his surprise, that there was much less solidification of the lung than at any other time since he first saw her. He removed the placenta with a hook this day; but very little hemorrhage occurred at any time. The dextro-quinine was now combined with Squibb's tincture of iron, five grains to thirty drops every three hours. From this time on, the convalescence went on uninterruptedly. The doctor calls attention specially to the treatment in this case, which he recommends in cases of double pneumonia, pleuropneumonia, intermittent fever and allied diseases.—[*Abstract from Med. and Surg. Reporter*, December 20, 1879.]

VALVULAR LESIONS OF THE HEART.

Dr. Austin Flint concludes a clinical lecture on this subject, summarizing the practical points as follows:

1. Cardiac murmurs may represent lesions which, if unaccompanied by symptoms referable thereto, enlargement of the heart not coexisting, and the heart-sounds normal, are to be considered as innocuous. The prediction of grave consequences, under these circumstances, is unwarrantable, inasmuch as they may never occur. Such lesions do not claim medical treatment, nor any extraordinary precautions; and it is desirable that the fact of their existence be withheld from patients, if this can be done with propriety.

2. Patients with valvular lesions are liable to suffer from functional disorders of the heart, arising from causes which have no pathological connection with the lesions. It is highly important to recognize, clinically, this accidental coincidence, in order to exercise a correct judgment as to the prognosis and treatment.

3. Various morbid conditions, other than functional disorder of the heart, may be accidentally associated with valvular lesions and more or less cardiac enlargement. These associated morbid conditions may be, in a great measure, responsible for symptoms and effects which seem to denote an advanced stage of the cardiac disease, whereas, the latter may occasion but little inconvenience, provided these accessory, co-operating conditions can be removed.

4. Valvular lesions involving either obstruction or regurgitation, or both combined, and having led to considerable or even great enlargement of the heart, under favorable circumstances as regards associated morbid conditions, are often well tolerated indefinitely. There is less reason for a hopeful prognosis, in respect of tolerance, when there is considerable aortic insufficiency, than in cases of aortic obstructive lesions, and those which occasion obstruction or regurgitation at the mitral orifice. The danger of sudden death from aortic regurgitation is lessened by co-existing mitral insufficiency.

5. In cases of orthopnoea and general dropsy dependent on mitral obstructive or regurgitant lesions and enlargement of the heart, digitalis and active hydragogue purgation repeated from time to time, not only afford notable relief, but there is reason to believe that life is sometimes thereby much prolonged.—[*Medical News and Abstract. Jan., 1880.*

EXTRACT OF MALT.

DR. H. D. RODMAN writes: "This invaluable preparation is rapidly gaining ground as a curative agent in all forms of chronic debility, from whatever cause. It is especially applicable in bronchial affections, in syphilis, and in the extreme debility with loss of appetite depending on chronic uterine affections. There are ten or twelve preparations of malt extract with other medicines. Of these I have used but three: the simple malt; malt with cod liver oil; and malt with citrate of iron and quinia. It is about four years since I began the use of malt. In that time I have prescribed it frequently, and never without satisfactory results. Within the last twelve or fifteen months I have prescribed extract of malt with cod liver oil for three confirmed consumptives, whose rapid recovery from what was regarded as their death sickness, was looked upon as almost miraculous by all who were acquainted with the cases. I attributed their recovery to Trommer extract of malt with cod liver oil. It is preferable to cod liver oil from the fact that it is more easily assimilated. I have never known it to disagree with the stomach, except after having been taken continuously for a considerable time. Cod liver oil is frequently unbearable. I have met with patients who could not under any circumstances take cod liver oil pure, who could take with a relish extract of malt with cod liver oil.

Extract of malt with citrate of iron and quinia is one of our very finest tonics and fat-producers, and patients use it with a better relish than any of our bitter tonics.

I regard malt and its combinations as invaluable remedies,

and as having already added many years to the lives of consumptive and scrofulous patients, and the physician who fails to arm himself with this curative agent does great injustice to those who entrust their lives to his keeping." — *Louisville Medical Herald*, January, 1880.

NOTES AND ITEMS.

MANY of the readers of the *COURIER* will recollect, in Vienna, the genial first assistant of Rokitansky, Scheuthauer, who used to declaim with so much unction and enthusiasm, over the piled-up relics of "medical failures" in the pathological lecture-room. The Doctor, now Professor, opened a recent session of the Medical Association at Budapest, with a memorial lecture in honor of Rokitansky, which held the attention of his hearers for over two hours. The Professor sketched the history of Pathological Anatomy from its feeble beginnings, in the time of the Renaissance, to its present, and analyzed the position of Rokitansky in reference to his distinguished co-laborers, Virchow naturally receiving especial attention. The lecture is to be published, and we may hope to possess this valuable addition to medical literature. Prof. Scheuthauer, towards the close of his connection with the Vienna Hospital, announced to his class one morning that he had that day made his 30,000th post mortem! Such is the wealth of material offered in that famous school.

PROF. BILLROTH reports a case of amputation of the leg for gangrene after frost-bite, in a vigorous man of 38 years. The man, a superintendent of building, suffered for years from a predisposition to congelation of the toes, which was made known through intense redness, swelling and pain. Four weeks before the operation, gangrene of the anterior portion of the left foot set in. In spite of the application of the elastic bandage, such a violent hemorrhage attended the use of the knife, that digital pressure was required. Upon examination, all the

arteries were found to have undergone calcareous degeneration, a remarkable condition at the age of the patient.

Five years previously he had syphilis, and in his thirteenth year suffered for four months from palpitation of the heart. Heart normal. The case is probably not one of true gangrene upon frost-bite; the cold only precipitated the gangrenous condition that might have occurred spontaneously.

Billroth also reports two other cases of syphilitic arteritis, in which thickening of the intima led to obliteration of the vessels, and a resultant spontaneous gangrene; also, a case of dry gangrene of the hand in a woman, requiring amputation. She died some time later, the wound having meanwhile healed, and at the post mortem there was found calcareous degeneration of the arteries of the arm.—[*Vienna Wochenschrift*, No. 51. 1879.

SINGULAR CAUSE OF DEATH.—A singular case of accidental death formed the subject of a recent inquest in London. A carman was thrown with some violence from his van, and on being picked up was conveyed to the Middlesex Hospital, where, after a time, he regained his senses, and was allowed to go home. The same afternoon, however, he became again insensible, and died in a few hours. Upon *post mortem* examination it was found, as a result of the violence of his fall, that two of the bones of the skull had separated at the sutures. There are only two other such cases on record, where the bones of the head had separated at the sutures without apparent injury to the bones themselves. [*Med. Times and Gazette*, Jan. 3rd, 1880.

A SPECIAL CARMINE SOLUTION FOR HISTOLOGY.—Dr. Johann Csokor, of Vienna, in the *Vienna Wochenschrift*, No. 48, gives the following method for preparing carmine to be used in the coloring of tissues. Take of best cochineal about 3 grammes; add 200 grms. distilled water, holding in solution 0.5 grm. burnt alum. Triturate thoroughly, and boil for half an hour, then filter. The filtered liquid is of a deep cherry red. It has several advantages as a coloring agent. Tissues treated with chromic acid, or pot. chromate, are colored as thoroughly as are alcoholic preparations. The cell nuclei are more deeply tinged than the rest. Tissues in alcohol require two to three minutes exposure; in chromic acid, thirty minutes at least.

REMARKABLE CASE OF HEMORRHAGE DURING PREGNANCY.—Dr. C. B. Townshend reports a case of hemorrhage occurring during the third month of pregnancy. There was a slight show for several days, and then a profuse flow to such an extent that the patient became blanched with a thready pulse of 110 and delirium. Cold applications, brandy and opium, checked the hemorrhage and revived her, and pains came on quite frequent and strong. However, they soon diminished, and the hemorrhage recurred. Thinking it in vain to attempt to preserve the ovum, he administered a drachm of fluid extract of ergot, with the view of securing its expulsion. To his surprise, however, it simply produced slight continuous pain, which checked the hemorrhage, except a very slight trickling, which was controlled by the administration of sulphate of magnesia in doses of one drachm, with fifteen drops each of tincture of opium and dilute sulphuric acid. During the following six weeks there were three similar, but less severe attacks; during the next month after that none at all, and she says that she can feel distinctly the movements of the child.—*The Lancet*, Nov. 29, 1879.

TUESDAY EVENING, February 10, the Academy of Science gave a "Microscopic Soiree" in the Library-room of the Washington University. A brief lecture by Professor Nipher, which gave an account of the essential elements of the microscope, and explained to the audience, in a general way, the phenomena of "polarized light," was followed by a display of a great variety of the most interesting and wonderful of microscopic objects. Some thirty-five instruments, representing the work of the most celebrated instrument makers in the world, were arranged on tables in different parts of the room, and the owners or others exhibited and explained to the visitors the different objects. The invited guests of the Academy numbered about two hundred and fifty ladies and gentlemen, and the universal verdict was that the evening had passed most profitably and pleasantly.

STRANGE SUPERSTITION.—In some of the provinces of the south of Russia there exists a strange belief that when one sleeps with great thirst, such as one experiences after hard work in the fields in summer, and this thirst is satisfied in a dream, it is a serpent which has entered by the open mouth, causing an agreeable sensation of coldness.—*Gaz. Hebdomad*, Dec. 5, '79.

ONE of our subscribers inquires what our experience has been in the use of *Viburnum Prunifolium*. We are not able to report any very extensive observations, but have been much pleased with its action in controlling excessive menstrual flow, with or without severe pain. We have in mind specially, a case where the relief was very prompt and decided, in which the patient could not take ergot in any form. We have had no observation of its use to prevent abortion, but excellent results of such application have been reported to us.

VOL. I. No. 1.—Besides the *Alienist and Neurologist*, which we mentioned last month, we have received the following new journals:

Chicago Medical Gazette, of which E. C. Dudley, M. D., is the editor and proprietor.

Kansas Medical Index, edited by F. F. Dickinson, M. D., Fort Scott, Kas.

Leonard's Illustrated Medical Journal. (Quarterly.) Henri C. Leonard, M. D., editor and proprietor, Detroit, Mich.

Indiana Medical Reporter, Evansville, Ind. A. M. Owen, M. D., J. E. Harper, M. D., Benj. F. McCoy, M. D., editors and proprietors.

Medical Summary, P. H. Andrews, M. D., editor and proprietor, Lansdale, Pa.

May they all prosper and be very useful.

PROF. HEBRA, ON ACCOUNT OF ILL HEALTH, has requested to be relieved for the present session from his duties in the lecture room. He asks of the authorities that his chair be filled by Prof. Kaposi.—*Vienna Medical Wochenschrift*, No 45.

THE OFFICERS OF THE *St. Louis Medical Society* for 1880 are: G. M. B. Maughs, M. D., President; F. W. Wesseler, M. D., Vice-President; M. H. Post, M. D. Recording Secretary; J. C. Lemen, M. D., Corresponding Secretary; W. E. Fischel, M. D., Treasurer.

OUR friends will please note the address of our business editor, DR. I. N. LOVE, 3401 CHESTNUT ST. Post office orders should be drawn upon the "WEST ST. LOUIS STATION," St. Louis, Mo.

PRESLEY BLAKISTON is the successor of the old and well-known publishing house of Lindsay & Blakiston.

THE DEATH ROLL FOR 1879. Death has been busy among the shining lights of the profession during the past year, and it is with a feeling of melancholy that we look upon the long list of able men that have passed from among us during the last twelvemonth. The best known names are as follows: Murchison, Callender, Maunder, Soelberg Wells, Leared, Tilbury Fox, Beigel, Brooke, Sir Gilbert Blane, Leach, Black, Fleming, Chavasse, Deville, Devergie, Gubler, Piorry, Chauffard, Jardieu, Chassaignac, Stilling, Neubauer, Bumstead, J. A. Meigs, Wood, Isaac Hayes, M. B. Wright.

THROUGH an oversight we failed to make mention at the time, of the death of the able London ophthalmologist, Soelberg Wells. He graduated at Edinburgh, and afterwards spent several years abroad, and having selected diseases of the eye as a specialty, made his studies in that branch under Donders, Helmholtz, and Graefe, especially the latter. He left a monument of his genius in his great work on "Diseases of the Eye." He died, after several years of ill health, at the early age of forty-three.

MR. THOS. HUNT died a short time previous, at the advanced age of eighty-one. His name will be remembered in connection with diseases of the skin, in which affections he had the most implicit faith in the curative influence of arsenic. He also cherished some peculiar notions about the proper method of administering mercury. Parasitic diseases he attributed to dirt and dyscrasia. A number of works on dermatology are from his pen.

DR. ALFRED FOURNIER was recently made a member of the Academy, and professor of the new chair of cutaneous and syphilitic diseases, in the same week. Although Ricord was refused this position twenty years ago, and is now too old for it, it may be some satisfaction to know that it is filled by his most distinguished pupil.

ARRANGEMENTS have been made for the binding of the second volume of the *COURIER* in the same style as the first volume. Any of our subscribers who desire, can exchange their unbound numbers for a bound volume by sending them to us with fifty cents for binding.

THE bound volumes of THE COURIER for 1879, will be furnished at \$2.00 per volume. We wish to secure a few copies of the September number, for which we will pay thirty cents each.

MACMILLAN & Co., will soon issue a cheap "Students Edition" of the text-book on Physiology, which we review this month. Vid. p. 174.

OBITUARIES.

HANCOCK.—Henry Hancock, F. R. C. S., the well-known London Surgeon, died at his country seat, January 1st, in the 71st year of his age. He had retired from professional work some years ago. He was the first to remove the os calcis and retain the foot, and his name will always be honorably associated with conservative surgery and affections of the joints. He wrote excellent papers on the operation for strangulated hernia, in which he advocated opening the sac, and on stricture of the urethra; he also published an account of the arrangement of the muscular structure of the urethra. For many years Mr. Hancock was surgeon to the Royal Westminster Ophthalmic Hospital, and had a large private practice in eye cases. In connection with ophthalmology, he introduced a mode of dividing the ciliary muscle for glaucoma, an operation which has been displaced by iridectomy.

BUDD.—Dr. William Budd, F. R. S., a distinguished English medical writer and practitioner, died January 9th last, aged about 69. He was a prolific and talented contributor to medical literature; but his principal effort was his notable work on "Typhoid Fever; its Nature, Mode of Spreading and Prevention."

PORTER.—Deputy Surgeon-General J. H. Porter, of the British Army, died January 9th, at Sherpur, while serving with the division under General Roberts. Besides contributing many brilliant papers to periodical literature, he was the successful competitor for the prize offered by the Emperor of Germany, for the best essay on the "Practical Treatment of the Wounded in War."

SOCIETY MEETINGS.

THE ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY holds its next meeting on Thursday, February 19th, at the residence of Dr. G. A. Moses, 3202 Olive street.

THE MEDICO-CHIRURGICAL SOCIETY, held its first meeting in the new Hall of the Society, No. 2334 Washington Avenue, on Monday evening, February 2d.

One of the chief objects of this Society is to sustain a READING ROOM AND LIBRARY for the benefit of its members; and to this end the Hall will be comfortably furnished and open to members during the day. A large number of the most valuable foreign and domestic periodicals relating to medicine and surgery, are received regularly, and it is proposed to extend this list as rapidly as possible. We congratulate the members on the very favorable auspices under which their excellent enterprise is inaugurated.

At the annual meeting, January 18th, Dr. N. B. Carson was re-elected Secretary and Treasurer, and Drs. Todd, Moses and Hardaway, were elected Executive Committee.

The COURIER will continue, as heretofore, to publish the transactions of the regular meetings.

MORTALITY TABLE.

For the Four Weeks ending January 17, 1880.

CITIES.	ESTIMATED POPULATION	DEATHS.	DEATH RATE PER 1,000.
New York.....	1,097,563	2,024	24.
Philadelphia.....	901,380	1,155	16.7
Brooklyn	564,448	835	19.2
Chicago.....	537,624	670	16.2
St. Louis.....	500,000	454	11.8
Baltimore.....	400,000	515	16.7
Boston.....	375,000	660	22.8
San Francisco*.....	300,000	233	10.1
Cincinnati.....	280,000	361	16.8
New Orleans.....	210,000	379	23.5

* For only three weeks.

ST. LOUIS COURIER OF MEDICINE

— AND —
COLLATERAL SCIENCES.

VOL. III.

MARCH, 1880.

NO. 3.

ORIGINAL ARTICLES.

POST PARTUM HEMORRHAGE.

BY S. G. MOSES, M. D., *formerly Prof. of Obstetrics, Missouri Medical College.*

AMONG the accidents occurring to the parturient woman, there is none which is more common, none more alarming and certainly none requiring more energetic and judicious action and self-possession upon the part of the physician, than post partum hemorrhage. After an apparently healthy labor, when the accoucheur is relieved from witnessing the terrible throes and agony of the last great efforts of expulsion of a living child, when the mother is repaid for her great suffering by the welcome cry of her new-born babe, suddenly, perhaps even while the physician is congratulating his patient upon this great happiness, comes rushing from the uterus a flood of the living fluid, bleaching the patient's face and bringing her to the very verge of destruction. I say no case requires, on the part of the physician, more self possession, more rapidity of judicious action, than this terrible occurrence.

I have selected this subject for this short paper, not with

the idea of giving any original views, but simply to record the results of a tolerably extensive experience, ranging over nearly half a century.

When the uterine contractions, which expel the fetus and its appendages, by the special arrangement of its muscular fibres, closes or so far diminishes the caliber of the vessels which creep into its walls, as to interrupt the circulation in the utero-placental vessels exposed by the separation of the placenta, enabling thrombi to form and thus partially close their orifices, when this contraction is uniform and perfect, there is no danger of excessive flooding; but when, under certain conditions, their contraction is more or less feeble or unequal, or when it does not take place at all, as in complete inertia, this accident is most likely to occur. Thus it will be evident that uterine inertia is the great cause of post partum hemorrhage.

The causes of uterine inertia may be divided into predisposing, and exciting.

A predisposition to uterine inertia and hence to flooding, exists—

1. In plethoric persons, especially those who are accustomed to great losses of blood at the menstrual epoch, and those who suffer from endometritis and uterine tumors.
2. In those of lymphatic temperament, where the general muscular fibre is soft and flabby.
3. In those who have suffered from uterine hemorrhages or floodings in former accouchements.

Among the exciting causes are—

1. Long and tedious labors wearying the muscles until they lose the power of contracting.
2. Too rapid or sudden labors, where the whole uterine contents are suddenly ejected, producing, as it were, a surprise to the uterus, leaving it in a state of inertia.
3. Over-distention of the uterus from excessive quantity of amniotic fluid (hydramnios) or from multiple pregnancy.
4. Irregular contractions of the uterus, as where part of the muscular fibres are relaxed, while other fibres are con-

tracted, as occurs in what has been described as the hour-glass contraction. It is contended by many authorities, that this condition only takes place at the internal os, but I think I have met with a few cases where it seemed to me that this contraction was confined to the circular fibres of the body, while the longitudinal were relaxed. I well remember one special case where this condition occurred; the case was one of retained placenta, where the uterine fundus was easily felt high up above the umbilicus, while the uterus was almost cylindrical in form. As the patient was flooding dangerously, I introduced the hand and arm nearly to the elbow, of course with great difficulty, and most gently and cautiously. Finding the partially detached placenta at the uterine fundus, I slowly separated the still attached portion and delivered it slowly, supporting with the other hand the uterine globe, and allowing the uterine contraction to expel the hand and placenta, thus arresting the hemorrhage, as most fortunately the uterine fibres contracted firmly, and the danger was passed. No bad symptoms occurred excepting anemia, from excessive loss of blood.

I therefore, cannot but believe that the hour-glass contraction, so-called, may occur above the os internum by contraction of the circular fibres.

5. Partial or complete inversion of the uterus may be a cause of hemorrhage.

6. Retention of the placenta, or of a portion of the membranes, or of coagula, by preventing the uterine contractions and keeping up an irritation, may also be causes of hemorrhage.

I shall not refer especially to uterine tumors, ruptures of the uterus, etc., but, of course, these may produce hemorrhages.

Floodings may come on immediately after the expulsion of the child, before the placenta is delivered, or may follow the delivery of the placenta. Sometimes even when the hard uterine globe has been felt through the abdominal walls, sudden relaxation may occur. Sometimes hours

may elapse, and even several days, before the flooding takes place. However, I am satisfied that in most of such secondary hemorrhages, a portion of placenta, or of the membranes, or perhaps a clot has been retained, producing the accident.

Signs, Symptoms.—As just observed, the flooding may come on suddenly, immediately after the birth, or some time may elapse before its symptoms are evident, or it may come on slowly. In some cases the uterus, apparently perfectly contracted, will again relax, and violent hemorrhage occur. It may be external, or *apparent* from the external discharge, deluging the bed, or it may be internal, or, more properly speaking, retained *in utero*. In either case, the symptoms are those of exhaustion, pallor of the face, feeble pulse, oppression or sighing, gaping, “*besoin de respirer*,” restlessness, jactitation, palpitation, syncope. Now, when these appear, an examination must be made immediately. Should we find no apparent discharge, but on placing the hand on the abdomen, find the uterus distended, we are sure that there is internal hemorrhage. If we find that the uterus is contracted and small, we must by palpation, discover if the abdomen is distended by intestinal gas, as this sometimes arises from the sudden taking off the pressure of the enlarged uterus, or the symptoms of faintness may arise by the pressure having been taken off from the large blood vessels of the abdomen, the sudden afflux of blood from the brain, producing these symptoms. But we can always be certain by vaginal examination; with careful examination of the abdomen, if necessary, introducing the finger into the os.

The abdomen may also be enlarged by an over-distended bladder; this can be decided by introduction of the catheter. As regards the prognosis, a very large quantity of blood may be lost without producing death, especially if this takes place slowly, and we should not despair, even under desperate circumstances, so long as there is a spark of life.

Treatment.—If your patient is of full habit, plethoric,

with strong pulse, occasional headache, the judicious physician will endeavor to relieve this condition by diet, saline purgatives, and, if necessary, venesection.

If, on the contrary, the patient is of a relaxed leucophlegmatic temperament, by proper exercise, tonics, the best of all, good beef-essence, and chalybeates, endeavor as far as possible, to invigorate and improve the general health.

I shall introduce in this place a case to exemplify the preventive treatment that my experience, has proved most satisfactory.

In 1848, Mrs. O., about thirty-six years of age, of a lymphatic temperament, relaxed muscular fibre, engaged me to attend her in her fourth pregnancy. She informed me that she had always suffered from violent floodings after the birth of her children, and, in her last confinement, came very near losing her life; that her labors were very rapid, seldom lasting over an hour. Thus placed upon my guard, I gave directions that I should be summoned on the first indication of approaching labor. Immediately, then, on the first pain, I was notified. We were near neighbors; so no time was lost.

On examination, I found that the pains were very slight, but the os was perfectly dilatable, the vertex presenting. I immediately placed a wide bandage over the abdomen, crossing it at the back, and gave the ends to two assistants, directing them when to tighten it, so as to make steady pressure on the abdomen and follow up the contracting uterus. I then ruptured the membranes. In a few minutes, active expulsive pains came on. Just before the head passed from the vulva, I administered a drachm of powdered ergot. The whole labor did not last over an hour from the first pain until the child, an eight-pound male, was delivered; in a few moments the placenta was extruded; the uterus, under moderate frictions, contracted firmly and permanently; there was no flooding. I remained at the bedside for fully two hours, almost constantly, with my hand over the uterus, watching my patient

carefully. The uterus did not relax, and my patient, for the first time, had no post partum hemorrhage. (I might here say, that the lady died of cholera in May, 1849.)

It will be observed that since the occurrence of the above case, and the treatment then employed, thirty years have gone by; but I have seen no cause to change this plan. The great means of preventing post partum hemorrhage, is as far as possible to insure perfect uterine contraction. To effect this object, we should avoid emptying the uterus too suddenly of its contents, and follow up the uterus by a hand placed over this organ gently, but firmly compressing, or rather supporting its walls. The early rupture of the membranes when the expulsive pains are strong, the os dilated or dilatable, the presentation normal, has been my uniform practice, administering a pretty full dose of ergot, (my ordinary dose is a drachm of Squibbs' fluid extract,) just before the head is extruded, not to hurry the delivery of the shoulders, but to permit the uterine contractions to finish their work; assisting these by frictions and kneading the uterus until it hardens under the hand; not leaving the bedside of the patient until the placenta is thrown off and the uterus is firmly and evenly contracted, and keeping one hand over this organ and continuing the frictions from time to time, until assured that it is firmly and permanently contracted, never applying the permanent binder until satisfied that this is the case. With these precautions it is seldom that this grave accident will occur. It is advisable not to leave the patient for some time after the confinement nor as long as the pulse is over 100, as I believe Playfair remarks, "that so long as this is the case, hemorrhage may occur." My general rule has been to remain in the room or at hand for at least an hour, and until the woman "has been put to bed, or rather until all the soiled clothes have been removed." It is best not to permit the T bandage to be applied for several hours, but to place loosely under the patient the towel so that the discharges shall not be shut up in the vagina, and thus a grave accident, retained or concealed hemorrhage, take place. The

most important duties of the accoucheur most frequently (for most cases are natural) commence after the child is born, and it therefore behooves him to watch his patient for some time. The accoucheur should never be in a hurry to leave his patient, and a few hours remaining within call may save a valuable life.

The following case illustrates the importance of this watchfulness.

Mrs. L—— was taken in labor about mid-day. After rather a slow labor of about twelve hours, owing to irregular pains partaking of the spasmodic nature, she was delivered of a living child. There was some detention in the delivery of the placenta arising from irregular uterine contractions. As there was some slight flooding, I was obliged to assist by introducing two fingers into the os, and carefully delivering it. The uterus contracted well and after remaining by the bed-side about an hour, putting on the binder, and giving directions to a very intelligent nurse, I was about taking my departure; but a severe sleet storm came on, and, as I was at some distance from my house, I concluded to remain until morning, falling asleep on a lounge in the adjoining room. In about three hours the nurse hastily summoned me, stating that Mrs. L—— was looking very pale and appeared to be suffering. I immediately hastened to the bedside, and found my patient almost in a state of syncope, pulse at the wrist very feeble, gaping, deep sighing, etc. I immediately pulled the pillows from under the head, threw up the windows, and stripping off the binder, found the uterine globe high up above the umbilicus. There was no external hemorrhage, but the uterus was full and distended. I gave brandy and water every five minutes; commenced brisk friction over the abdomen, and passing my other hand into the uterus, slowly evacuated its contents. Fortunately the uterus responded and contracted. Of course I gave ergot. I believe ice was introduced into the uterus, for there was constant disposition to uterine inertia. At length permanent contraction took place, and the life of a most valuable lady was saved. She

of course was much exhausted, and I did not leave her for twelve hours. She had a good recovery and is still living. I thanked Heaven for that sleet storm.

As I am of rather an anxious temperament and feel my responsibilities perhaps rather too acutely, and know from experience, how suddenly flooding comes on, even in the most favorable labors, it has been my constant rule in every case to use all the precautions to prevent it. So I follow the plan laid down by the great Dewees, the most practical writer I know of on obstetrics, to rupture the membranes early, to which I add the administration of a drachm of fluid extract of ergot just before the birth of the child. This has been my practice for over thirty years; in some cases *now* I use this valuable oxytocic hypodermically, especially when the internal administration produces nausea.

Yet, in spite of all the precautions we may take, this accident will occasionally occur, and we must be prepared to meet it. The first thing to do is to immediately withdraw pillows, so as to lower the head, to order the windows to be thrown open, if the case is urgent to administer stimulants—brandy and water in small quantities—by the spoonful, not permitting the head to be raised from the bed. On examining the abdomen and making a vaginal examination, we will often find the uterus flabby and soft, or irregularly contracted and blood streaming from its cavity; or we may find the uterine globe large and distended with blood, though with very little or no external flow. Of course, the imperative duty is to arrest the hemorrhage. To effect this, we must if possible, induce tonic contraction and overcome the inertia; or, as Dewees calls it, partial and entire *snycope* of this viscus.

There are two methods by which uterine hemorrhage may be arrested: 1. By inducing uterine contraction. 2. By producing thrombosis in the uterine sinuses. Post partum hemorrhage may arise before the placenta is delivered, or after the placenta has been extruded. That flooding should occur, it is necessary that the placenta

should be either partially or entirely separated from its uterine attachments; for so long as the placenta is still firmly attached to the uterine walls, no hemorrhage will take place, even if complete uterine inertia should exist. We will speak of this condition hereafter.

During the last expulsive efforts or violent uterine contractions, it generally happens that the placenta is more or less detached; hence, there is almost always more or less hemorrhage.

When this is the case and the uterus is left in a condition of inertia more or less pronounced, the hemorrhage will be proportionate; when the detached portion is moderate, the flooding will be slight; when extensive or complete and the uterus does not contract, the flooding will be decided.

If we can in the first condition arouse the energies of the uterus by frictions, ergot, etc., and by proper pressure express the placenta, generally we can keep up this contraction and arrest the flooding.

Should we, however, be unable to excite the uterine contractions, it will be absolutely necessary to remove the placenta. This should be done by carefully introducing the hand into the uterus and removing the placenta and the coagula contained within the organ. This should not be done hurriedly, but while the one hand is within the uterus, the other should grasp and steady it externally. The placenta should be detached as far as possible and the hand slowly moved along the uterine walls, so as to excite uterine contractions and cause, if possible, the hand and placenta to be expelled; at the same time the external hand should keep up friction. In this manner we may generally succeed in arresting the discharge; but it may happen that by the irregular contractions we may find the placenta incarcerated. We can in such a case almost always gradually distend the contracted fibres, pass the hand through the contracted portion and grasping the placenta, relieve it as above. The introduction of the hand will generally excite uterine contractions, and, unless the placenta is morbidly attached, we can remove it.

But should a portion of the placenta be firmly adherent, I believe all authorities agree that no violence should be resorted to, but that we should leave such portions to be extruded or detached by future uterine action. Our great and imperative duty is to enable the uterus to contract, and thus close the bleeding vessels. I have several times introduced my hand into the cavity of the uterus, but always with great care, and I have never seen any bad results. I am inclined to believe that want of gentleness, or too sudden withdrawal of the hand, or some violence, is the cause of such accidents as are referred to by many authorities.

To return from this digression. It may happen that in spite of these efforts we cannot induce tonic contraction; or we may find the second condition, inertia of the uterus, after the expulsion of the after-birth.

Perhaps the most fatal form of post partum hemorrhage is when the whole uterine contents are suddenly thrown off by a violent expulsive effort, leaving the uterus in a state of inertia. Then the loss is sometimes so enormous as to produce syncope and death, almost instantaneously. Yet, as before observed, in most cases we have a little time, and even a few moments may enable us to save life. Position, cool air, stimulants, brisk frictions over the abdomen, turning out the clots, introducing the hand into the uterine cavity, hypodermic injections of ergot, ergot internally, dashing cold water on the abdomen, ice introduced into the uterine cavity, cold injections, or, as more recently used with great success, hot water injections, (110° F.) may induce uterine contractions, and thus save our patient.

Faradization has been advised to arouse dormant energies.

I might here introduce a case of enormous post partum hemorrhage occurring in my practice a few years ago in a case of twins.

Mrs. A—, a strong Irish woman, after a tolerably tedious labor, gave birth to twins, each with independent placenta. The last pains were violent, and the delivery was

very rapid, the uterus extruding the children in quick succession, and the placenta following almost immediately; the rush of blood was fearful, almost deluging me. Beside the bed was a pail of very cold water; seizing a pitcher, I dashed the water on the abdomen. The shock was so great that happily it *astonished* the uterus and aroused the patient from syncope. The uterus contracted, a full glass of whisky and a dose of ergot was then given, and the patient recovered without a bad symptom.

Another case is strongly impressed upon my memory, as it was the first case of violent hemorrhage I ever saw. It occurred in a young and healthy patient.

Mrs. G—— was confined of a living child after a perfectly natural labor. The after-birth was expelled by the uterine contractions. All appeared to be going on nicely. I left the room for a few moments to allow the attendants to change the wet sheets, but certainly was not absent more than five minutes. On opening the door I found the patient standing near the bed, the old women insisting that she should get up so as to empty the clots, as they said. Before I could get her in bed hemorrhage of a most fearful character set in. She fainted. I was the whole of the night at the bedside. The uterus would contract, under frictions, and then would relax again. At length I introduced pieces of ice into the uterine cavity, and finally succeeded in producing tonic and permanent contraction. She recovered without a bad symptom.

But we meet with cases where we cannot induce uterine contractions; where ergot, injections, cold and hot, have failed. We must then resort to styptic intra-uterine injections so as to form thrombi and seal up the bleeding vessels. Various astringents have been used. Dewees refers to vinegar and water, port wine and water thrown by a syringe with an elastic tube attached to the nozzle, copiously into the cavity. But of all astringents the most reliable is the perchloride of iron, so highly recommended by Barnes, etc. This *will* coagulate the blood; this will arrest the hemorrhage; this is the giant styptic, and no doubt has saved, and will save, many valuable lives.

We should, however, before using iron, endeavor to remove the coagula, for, as all know, they become hard by its use, and thus act as irritants. We should introduce the tube up to the fundus, and as the iron passes over the uterine walls we can feel them become corrugated. It must be remembered that these astringents act by forming thrombi in the mouths of the vessels; hence, after their employment, we must no longer endeavor by frictions to excite contractions for fear of displacing the newly formed coagula.

Tampons have been advised, although I should hesitate to use them, never have done so, as the other means before mentioned will usually produce the desired effect. However, I was called in consultation in a case where they were employed by the attendant physician in order to arrest the hemorrhage.

About ten years ago I was called to see in consultation Mrs. T., who lived ten or twelve miles in the country. I was informed by the attendant physician that the lady had been confined during the night; that the labor was natural, though somewhat precipitate, but was followed by excessive flooding; that he had removed the placenta, but in spite of his efforts the flooding had continued to an alarming extent; that he had then resorted to plugging the vagina, packing the tampon against the os, had bandaged the abdomen, raised the feet of the bedstead, and given brandy and other stimulants from time to time. On examining the patient, I found her almost bloodless, constant disposition to syncope, ringing of the ears, almost blind, the voice nearly extinct, the pulse scarcely perceptible at the wrist; the uterine globe reached above the umbilicus, but was tolerably firm to the touch. After administering some stimulants and bandaging the lower extremities up to the hips, I cautiously withdrew portion after portion of rags which filled the vagina. Steadying the uterus with the left hand, and keeping up frictions, I gave a dose of ergot and then introduced my hand into the cavity and very slowly turned out the clots and a large portion of retained placenta; the

uterus responded to the frictions and contracted on the introduced hand. The lady recovered.

Bandaging the Extremities.—It will be found useful in cases of excessive hemorrhage to apply a roller bandage to the extremities to keep as large a quantity of blood as possible in the trunk, and prevent syncope. I have used this expedient with benefit, as in the case just referred to. No doubt the best bandage would be the elastic one of Esmarch, if at hand. Compressing the aorta has been much lauded by some authors. Cazeaux and Velpeau recommend it. I cannot speak from my own experience.

Excessive loss of blood is usually followed by symptoms which require judicious treatment as reaction comes on, headache, intolerance of light and sound, all evidences of great nervous prostration. These symptoms are best relieved by opium. Dr. Dewees recommends two grains every two hours, or thirty drops of black-drop, or Batley's sedative, with occasional administration of stimulants, among the best being the carbonate of ammonia and brandy, carefully given. Of course, the general strength is to be supported; beef-tea is most valuable. I frequently use the Valentine's beef-juice. It is well borne by the most delicate stomachs. These means are to be assisted by chalybeates, especially the old and reliable preparation, the muriated tincture of iron. Absolute quiet of body and mind is always to be insisted upon.

Laceration of the maternal soft-parts may be suspected when the flow continues after the firm contraction of the uterus; an examination should be made, and if such be found, topical treatment should be used—styptics, etc.

I shall close this by a few remarks upon secondary hemorrhage. This accident may occur several days, or some say weeks, after delivery. I have already stated that in my opinion these are generally caused by retention of some portion of the placenta, or membranes, or uterine flexions. If, on examination, we find such to be the case, the cause must be removed, and while it might not be safe to use intra-uterine injections, it appears to me that swabbing-out

the uterus with perchloride of iron or with iodine would be the proper treatment. Dewees speaks most favorably of the administration of the acetate of lead and opium, and in former years I was in the habit of using this combination, but my chief reliance now is the ergot in repeated doses, with the local treatment above mentioned.

ALCOHOL IN HEALTH AND DISEASE.

BY R. BUCK, M. D., LONDON, ONT.

There are no more important questions before the medical profession to-day than the following: I. Can alcohol be so taken as to be of value to a healthy organism? II. Is alcohol of any value, and if so, of what value as a medicine? Hundreds of able men are seeking answers to these questions, but so far have found none which have been accepted with anything like universality by the large body of intelligent men in and out of the medical profession who are waiting a decision on these points. For there is still a large and intelligent body of men, as well in Canada as in all the other countries of Christendom, who believe honestly after lifelong experience and mature thought, that alcohol taken at proper times and in proper quantities, is capable of rendering life longer, more vigorous, and more happy; and there is another class equally intelligent, thoughtful and honest, who believe just as firmly that, whether taken in greater or less quantity, the balance of results is always against its use; that in proportion to the quantity of alcohol taken, be it more or less, the person taking it, has his life shortened, his vigor lessened, and his happiness decreased. So again, considered as a medicine, there are many able physicians in this country, as there are all over Europe, who consider alcohol one of the most

valuable drugs we possess—who would consider that the man who withholds alcoholic stimulants from a patient with typhoid fever or typhoid pneumonia, ought to be indicted for malpractice, while there are many other physicians, perhaps equally learned and thoughtful, headed by such men as Benjamin W. Richardson and William Gull, who rarely, if ever, use alcohol in any form in their practice, and who consider it of scarcely any or of no therapeutic value. It is highly undesirable that doubt should continue to exist upon such questions as these. For the sake of both the well man and the sick man, these questions should be answered as soon as possible, once for all, and set at rest for ever. For even if alcohol is not as harmful as the advocates of total abstinence say it is, still we know that the injury which it inflicts upon our race, is far from being contemptible. And on the other hand, if alcohol has half the value that its friends claim for it, then it is an agent, the loss of which, through hasty judgment and prejudice, should this happen, would be most calamitous both to the profession and to the world. And it does seem not a little remarkable, that upon points where experience is almost infinite in amount and freely accessible to every one, these doubts should have so long existed; and the fact that they still do exist, proves, I think, conclusively, that whether alcohol be harmful or helpful in health or disease, it must be (taken in reasonable amount, for a limited time,) far less harmful or far less helpful than either its opponents or its advocates say it is. For if alcohol, used in moderate quantities, possessed the power to injure that our total abstinence friends say it possesses—or if it had one-half the therapeutic value that its advocates claim for it, surely these questions would have been settled long ago.

The proper way to fix the value or no value of alcohol as a food or as a medicine, would be to find out what the organism does with it and what it does to the organism when introduced into the circulation. If this action and reaction could be determined with certainty, the answer to the

previous question would follow without further trouble. Unfortunately it has so far been found impossible to answer these questions with any certainty. There is no doubt that when alcohol is drunk in large quantities, the organism having at that time no need, in consequence of some exceptional condition, for these large quantities—there is no doubt, I say, that then a very large part of the alcohol leaves the body as it entered it, in the form of alcohol. Not having been altered chemically, and not being, like water, a constituent of the organism, it could not in this case have fulfilled the functions of a food; and if no medicine was needed at the time it could have done no good as a medicine, it seems clear then that in the case supposed, alcohol, however little harm it might do, could do no good. But there are other circumstances in which the problem is not by any means so simple, circumstances of exhaustion, and disease, in which it is not at all clear to me that the alcohol, or some of it, is not oxidized in the body, and though it cannot supply tissue, yet supplies force to the organism. It has been argued that alcohol is a food, because, it is said, those who habitually use alcohol eat less than those who do not use it. I believe this last is true, but I do not believe that the inference from this fact is correct. Those who use alcohol, use less food than do those who use no alcohol—but do they evolve so much force? If they do, then alcohol yields force to the organism; if they do not, then this argument breaks down. The fact is that those who use alcohol habitually, do not and cannot evolve force—either mental or muscular—as freely and to the same extent as can and do those who abstain from alcohol; and as a class, what Richardson calls the alcoholics, are sluggish and incapable as compared with those who use no alcohol, and that alcohol incapacitates us for any work to accomplish which requires the utmost stretch of our faculties, whether the work to be accomplished be muscular or mental: in other words, it reduces our capacity for work; that is, our capacity for evolving force. So that wherever great muscular strength and endurance is needed, the best advisers forbid alcohol.

And we all know, those of us who have ever seriously tried to think, and who have used alcohol, that the smallest quantity of this drug impairs mental vision, and relaxes the mental grasp upon phenomena. Such arguments as this might be furnished on one side of the question or the other almost *ad infinitum*, and no definite conclusion ever be arrived at, for the reason that, as I have said, the problem does not seem to be completely soluble from this side, because our knowledge of the total conditions of force-evolution by the organism is too limited.

In the remarks which I propose to make at present, I intend to approach the question not from the abstract side, the side of chemico-vital science, but from the concrete side, the side of experience. I propose to consider what may be called the historical side of the problem. Without calling in question directly the nutritive or therapeutic value of alcohol, I intend to inquire into the mental attitude of mankind at large towards this agent, and see whether something cannot be learned about it in this way. It needs no argument to show that opinion upon the value of alcohol is far from being fixed. Putting aside certain particular cases, such as shock, in which alcohol is given, not as a stimulant, but for its special physiological action of relaxing the small blood vessels, and which cases, as causes for the administration of alcohol, are, in proportion to those about to be mentioned, almost infinitely few,—I say, putting aside these cases, five positions have been successively occupied by the friends of alcohol, and attacked by its opponents. 1. The first of these five positions is, that alcohol, in the form of beer, wine or spirits, is necessary to maintain a healthy man in health, and to preserve the vigor and strength of his body and mind when subjected to the wear and tear of ordinary life. 2. The second position is, that in circumstances of unusual hardship, exposure and exertion, alcohol is necessary to prevent the exhaustion and breaking down of the organism. 3. The third position is, that, if not a necessity, alcohol can be so used by people in good health as to lessen the discomforts and add to the

comfort of life ; that, in fact, it is capable of increasing our happiness both absolutely and also relatively to our unhappiness. 4. In the fourth place, it is said that if alcohol is not a necessity for strong and healthy people, it is a necessity in the case of many people who are temporarily or permanently enfeebled from almost any cause. 5. And fifthly, it is claimed that alcohol is a valuable medicine ; in fact, indispensable in acute adynamic states. I intend to make a few remarks, first on each of these positions in turn, and then on all of them taken together.

It is scarcely credible to many of us now in this country that it was ever held that alcohol was necessary to enable a healthy man to maintain his strength and do his ordinary work ; yet a very few generations ago, in England, this belief was almost universal, and I myself have known many old people there who believed it, as firmly as many of us now believe that a man would get weak if he ate no meat. Though there are still advocates of alcohol who hold this position, they are few, and they are not among the learned ; and it may fairly be said, speaking generally, that this position is abandoned. The second position, that alcohol is necessary, or at all events useful, in circumstances of great exertion and exposure, is still largely held, though the evidence against it is overwhelming. In Arctic and other explorations, in training for boat-races, and, in fact, in all cases where unusual endurance is required, and where the men who are to bear the strain are under competent discipline, the use of alcohol has been abandoned, and in every case with advantage. It is found that men bear exposure and fatigue, heat and cold, hunger and thirst, better without than with alcohol, even when this is given under the orders of skilled physicians, which is as much as to say that our present knowledge does not enable us to use this agent in such a manner that it shall increase the energy of the organism. What now shall we say of the third claim which is made for this agent, viz., that, properly used, alcohol is capable of increasing the pleasure and comfort of human life, absolutely and relatively ? If

alcohol can do this, its use may be justifiable, though through it the total duration of life be lessened.

This is not a question which can be settled by reasoning. It must be decided entirely by experience. No one who has always been in the habit of using alcoholic stimulants can be heard on this point, because having had no experience of life without alcohol, such a person cannot draw a comparison between life with and life without that agent. The opinions of those who have never drank alcoholic liquors must equally be disregarded, since they do not know of their own experience, that they would not be more happy if they used them. We must confine ourselves, therefore, to the testimony of those who have, for a certain part of their lives, used alcoholic liquors, as a beverage, and who for a certain other part of their lives have altogether abstained from the use of these stimulants. Now I have known a great many people of this class, and have spoken to many of them upon this point, and I am able to say, that beyond all doubt, as far as the testimony of these people is concerned, the balance is strongly against alcohol. The verdict is unmistakable—it is, that the pleasure derived from alcoholic stimulation, no matter how slight or how great this may be, is, on the whole, more than balanced by the depression following it. I am also able on this point to give my personal opinion, based on careful observation of my own experience. For many years I used alcohol in moderate quantities in the forms of wine, ale, and whisky, sometimes using one and sometimes another for weeks and months at a time, and often going weeks or months without using any alcoholic liquid; and my mind is at last fully made up, that I, for one at least, enjoy my life more without alcohol than with it. Acting upon this conviction, I, something over a year ago, abandoned its use altogether, and my present intention is, to drink no more alcohol in any form or in any quantity, as long as I live. Now, if such evidence as I have given will not settle this point, it will show at least that this claim which is made for alcohol with so much confidence by many per-

sons, is not settled in favor of the use of alcohol, but that it is settled against its use, or else remains undecided. Since writing this paper, I have met the following remark in an article on "ALCOHOL; ITS ACTION AND USES," by Dr. Gasquet, in the *Dublin Review*, for April, 1879, and I was much struck with the singular resemblance between it and what I had just written a day or two before. Dr. Gasquet says, "I have questioned many persons who, having been always temperate, have become total abstainers, and have almost always been assured that they were conscious of an increased mental vigor and aptitude for work, and my own personal experience has been the same." But if we say that alcohol is not capable of adding to the pleasure of life (however much harm it may do along with this supposed good,) how shall we account for the almost universal consent of mankind to use this agent for this purpose? The answer to this question is, that up to a certain stage of development of the human mind, an immediate pleasure is more coveted than is a more remote though greater pleasure, or than a much greater but remote evil is dreaded. In the minds of savages, the present has a much greater preponderance over the future than with ourselves, and the tendency to drunkenness with them is very much greater than with us. So true is this, that many tribes of savages are rapidly dying out, largely on account of their excessive use of alcohol. And if they could procure alcohol as readily as we can, there is no doubt that very many races of savages would soon become extinct. And I do not expect that direct arguments in favor of temperance, will ever do very much toward making mankind abandon the use of alcohol, for nearly every one knows now, that the use of this agent is a mistake, a game where the chances are infinity to one against the player, a game where loss is indeed certain, and gain impossible. If, therefore, mere knowledge on the subject was of any use, we should be to-day abstainers. What is wanted, is something deeper than knowledge. It is the clearness of vision which enables us to see and realize the future as if it were

present, and the moral firmness which enables a man to do what he knows to be for his true welfare, and to leave undone (whatever the temptation to do it) that which being done he knows would be to his ultimate injury. In fact, the habit of mind which makes a man drink alcohol, in whatever quantities, that habit of mind which places instant gratification before ultimate welfare, is essentially the same habit of mind as that which makes men gluttons, liars, thieves, and unchaste; it is, in fact, as I have said, the habit of mind of the savage as contrasted with the habit of mind of the civilized man, and civilization itself—a higher civilization than we have yet reached, is the remedy for the use of alcohol, and this is the only remedy, as far as I can see, which is likely to do any real good.

What now shall we say about the use of alcohol by feeble persons, invalids, and all those the vigor of whose systems is below par? I have lately made a very large experiment which bears directly upon this point. I have discontinued the use of alcohol entirely at the asylum of which I have charge, except in the cases of persons who are not only feeble, but who are actually ill, and even in case of actual illness, (as will appear further on), I use very little.

At the time I assumed charge of the London Asylum, the average number of patients at that institution was about six hundred. These people used about twenty-five hundred dollars' worth a year of beer, wine, and whisky. Now, if alcohol does any good to feeble people, it ought to have done good to these people, for they belonged to the very class who appear to need stimulants the most, and the stimulants were given to them, not according to their own notions or feelings as to when they were to take them, and how much they were to take, but by thoroughly competent physicians, who had the patients under observation, either directly or indirectly, day and night. Over a year ago I entirely ceased to use beer, wine, whisky, or brandy, in the asylum. About two years ago I began this reform, as I call it. Each month I reduced the number on the list of those who were given beer, wine, whisky, or brandy, watching

carefully all the time the effect of the withdrawal of the stimulant. I saw nothing to warn me against the course I was pursuing, and, something over a year ago, I closed the spirit lists entirely. No evil consequences have followed this step; the health of the asylum was never better. I doubt if it was ever as good, as it has been since the use of alcohol has been discontinued; the death rate has fallen slightly; there has been a larger proportion of recoveries to admissions than there was while alcohol was being used, and, in fact, the change seems to be a change for the better in every way. What struck me as being most remarkable about this total abstinence movement was that the patients scarcely seemed to mind at all being deprived of their beer, wine or whisky, as the case might be. Scarcely any of them begged to have it restored to them, and the few who did so forgot all about it in a few days. In watching the individual patients as the stimulant was taken from them, I could very seldom see any difference in their health or strength which could be attributed to this cause. In the case of one very old man who had been a soldier, and who had probably used alcohol every day of his life for over fifty years, there was considerable loss of strength, and after a few weeks I put him on stimulants again. This man had been failing for some years, and since then he has died of old age. This was the only patient who seemed to feel the withdrawal of the stimulant.

In the case of another patient, a very feeble woman, the result was the reverse. This woman had not sat up for many months. She lay on a bed or sofa all the time. She had no disease, as far as I have been able to make out; she was simply weak. My chief assistant said, "If you take away her wine she will die." I put off taking it from her, for I was a little uneasy as to the consequence of the step myself. At last, over a year ago, I did stop it. In a few weeks afterwards she began to sit up, and she has sat up and walked about every day since. Now, even if the experiment just detailed to you stood alone, it would almost settle the question we are now discussing, for if six hundred

feeble people are as well off without alcohol as with it, why not six thousand, or six millions. But the experiment I have cited does not stand alone. Many other institutions of the same kind, or similar to the London Asylum, also do without alcohol, and while I have known of several asylums leaving off the use of alcohol, I have never known of one resuming the employment of this agent after a fair trial without it. This being the case, I think we may fairly say that though alcohol used in moderate amount, under the direction of a physician, may not be injurious, or at all events, not very injurious to the average invalid or feeble person, yet that it is certainly not indispensable to such persons, and that the probability is that in almost every, if not every case, they are better without it. We come now to the position in which alcohol is most strongly entrenched, that is to its use as a medicine. Considered as a drug, alcohol is supposed to be valuable in circumstances of extreme exhaustion—in what we call acute adynamic states. In typhus and typhoid fevers, in typhoid pneumonia, in malignant scarlet fever, in small-pox, and generally in states of the system where the patient is likely to die from asthenia, within a few days or a few hours, and where, if his life could be prolonged for a short time, the disease running its course, he would be carried over the point of extreme depression and his life saved, what shall we say about this?

We will say, in the first place, that it is very hard to tell, when the patients recover in such cases, what caused them to recover, whether they recovered because the disease was not severe enough after all to kill them, because their constitutions were stronger than supposed, or because they had some medicine which supported their strength or weakened the force of the disease. We will say, in the second place, that the best physicians, such as Benjamin Richardson and William Gull, do not use alcohol nearly as freely in either acute adynamic or any other cases, as did the best physicians of twenty or thirty years ago, or any time before that; and that the men of most ability and experi-

ence to-day, do not believe in the power of alcohol to tide the patient over a crisis with anything like the confidence that was reposed in this agent down to very recent times. But, besides these considerations, there is another which I think is entitled to still more weight. It is this : Whether we use or give alcohol to support the body under the strain of ordinary life, or under exceptional strain or exposure; whether we take it with a view of adding to the happiness of our lives; whether we give it to those who are merely feeble, or to those who are suffering from acute and dangerous exhaustion, we give and take it in every case with the same view—with the same expectation. This expectation is that it will in some way increase the ability of the organism to evolve force, or that it will in some way make the old supply of force go further in maintaining the functions of the body.

Now, either alcohol possesses this power, or it does not. If it does possess this power, it seems to me that all the claims enumerated in this essay, which are now or have been made for alcohol, must be essentially sustained. If it does not possess the power in question, then I think that it is equally certain that all these claims must be at last abandoned. That alcohol does not possess this power, is believed on the grounds of chemico-vital science, by those who have studied its physiological action the most deeply, and, as I have shown above, experience does not tend to the belief that alcohol possesses any such property. This being the case, it seems to me that we are obliged to conclude that so far we have no sufficient warrant for the use of this drug either in health or disease; and that, if we use it at all, it must be merely in the way of experiment, and with the full understanding that a vast preponderance of the evidence so far collected on this point is against the assumption that alcohol can be taken with advantage, except in certain very rare and exceptional cases, either in health or disease. And in connection with this general view of the case, we should never lose sight of the fact that while we know that alcohol introduced into

the system, either continuously in moderate amounts, or at one time in larger quantity, is capable of producing the greatest evils, of even causing death—it still remains doubtful whether in any amounts, or under any circumstances, it is ever of value to a living organism. This being the case, the attitude of reasonable men towards this agent, ought surely to be, instead of giving or taking it as a matter of course, until the point was settled, to leave the drug alone until it be shown—if that time ever comes—where and how it may be used, so that the balance of results from its use may be on the credit and not on the debit side of the ledger; and, meantime, let experiments be made by the members of the medical profession and others who are competent to conduct such experiments, as in the case of any other drug, the value or application of which is in doubt.

For what would any physician say if he were asked to countenance the indiscriminate use of any drug, say quinine, on the chance that its daily or habitual use by a large part of the community might possibly on the whole result advantageously. Would he not indignantly scout such a proposition, if indeed he could be brought to consider it at all? But if physicians countenance the habitual use of alcohol as a food, as a beverage, as a medicine, simply because people like it, and expect them to countenance it, and without being fully convinced at the time when they permit or order it, that it will be on the whole beneficial to the person who is to take it, what better are they in this case than they would be in the other which I have just supposed?

There is a curious parallelism between the use and disuse of alcohol and bloodletting. There was a time, not so very long ago either, when almost the same claims were made for bloodletting as those mentioned above, which have been made for alcohol. It was said:

First.—That, for a healthy person to remain in health, it was necessary that he should be bled once or twice a year. Second.—That if not absolutely necessary, still the person

felt better and was better for the loss of blood. Third.—That in almost all severe accidents and diseases, bloodletting was absolutely indispensable. These claims for bloodletting have been advanced one by one in the order in which I have mentioned them, and in the same order on which the claims for alcohol are now being abandoned; and I am fully satisfied that just as surely as the world has learned to do without being bled, except in very rare and special cases, so surely will it learn to do without alcohol except in equally rare and special cases. And I am also certain that just as the world is better off without the general use of bleeding, both for the sick and well, so will the world be far better off when it learns to abandon the general use of alcohol both in health and in disease. And I believe it would be perfectly safe to predict that a time will come, and that perhaps before many generations have passed away, when it will be as rare for a physician or surgeon to prescribe alcohol, as it is now for either of them to prescribe bloodletting; and when a healthy man will no more think of taking alcohol with a view of preserving his health, or to make him feel better, than he thinks now of going to a surgeon to be bled with a view to the same end. Neither is this, as might be thought at first sight, an unfair comparison, for surely it is as rational on the face of it to expect good results to flow from the withdrawal from the body of some of one of its constituent parts, as it is to expect benefit to result (except in very rare and exceptional conditions of the system) from the introduction into the body of a substance which has no chemico-vital relations with any of the tissues or fluids of any living organism.

If, then, alcohol does us no good when we are well, or when we are sick, when we are weak or when we are strong, how comes it that there is such a general consent among mankind to use this agent both in health and during the continuance of such a vast variety of illnesses? This is the question which I wish to consider before I close.

Alcohol possesses one property in common with all agents (such as opium, chloral hydrate, or hashish), which

act in a manner at all similar to itself on the nervous system, and this property it is of the utmost importance that we should fully understand. It is that when used at all frequently or continuously, it creates a demand for itself.

Everybody knows that this is true, but very few understand the full meaning of it. Why is it that alcohol, after being taken every day, or every few days, for a certain length of time, alters the system in such a way that, whereas in the first place there was no desire, there comes at last to be a strong desire to drink it? The answer to this question can only be reached by analyzing the effects of alcohol upon the human economy.

The immediate effect of a moderate dose of alcohol upon a person who takes it for the first time, is to produce a decidedly pleasurable feeling. The basis of this feeling is that the moral nature is so acted upon, that the positive functions of love and faith are exalted and the negative functions of hate and fear lessened or abolished for the time. Other effects are of course produced, such as a quickening of the intellectual processes and the power of liberating an increased amount of muscular energy. The effect upon the moral nature, however, is the main fact, and it is upon that that we have to keep our attention fixed at present. Looking steadily at that, and shutting out of sight every other element of the case, we see that the man is made for the time happier and better.

It is not possible, however, by means of alcohol or any other agent, to preserve the moral position so attained. No matter how used, or how much be taken, the moral exaltation passes away after a very few hours, and then a condition of things sets in, which is exactly the reverse of that which I have just described; that is, there is then established a moral state, the essential elements of which are an exaltation of hate and fear, and a diminution or abolition of love and faith, a condition in which the man, instead of being better and happier than usual, is worse and less happy.

Now you might think, as many thousands have thought,

that the bargain was a fair one, that the man had had his pleasure, and had paid for it, and that he and alcohol were even, and that there was nothing to grumble about. But this is not the whole story. It is only the beginning of the story. Unfortunately the whole story cannot be told, but I am going to tell all I can of it.

The next chapter begins this way: By means of a chemical agent, the man's nervous system has been forced into a state which it would not have assumed of itself under the ordinary conditions of life. As soon as this chemical agent is withdrawn, the efficiency of the nervous system falls as much below par as it was raised for a time above the normal standard. What we have left afterwards is the injury done by the process of forcing above mentioned. Let the forcing be done only once, twice, or half a dozen times, and the injury is almost or quite inappreciable, so that the man will say and think that he is as good a man as he was before he used any alcohol.

But go to the other extreme, and let the forcing be done a few thousand times. Then the injury which is really done every time that alcohol is taken in any quantity, but which is not at first noticed, becomes by gradual increase so great as to be unmistakable. What we find to be the habitual condition of the man's moral nature then is this: It is habitually depressed; fear and hate are constantly unduly prominent, and love and faith are reduced to a minimum. Formerly the man took alcohol for the pleasure it gave him; now he takes it to relieve him for a time from a state of suffering, which is constant, and which would be, without occasional relief, unbearable. But before the case has gone as far as this, half way, we will say, between the first glass and the condition just described, alcohol still gives pleasure, and the man can, or at least thinks that he can, still do without it. But let the most moderate habitual user of alcohol, not take any at all for a few days or a few weeks, and he will have a feeling of unrest, discomfort, perhaps of vague fear, or of irritable temper; he will feel that he wants something, that he is not right. Now, what does this mean?

I will tell you what it means. The great nerve centers, the source of all feeling and emotion, have been injured by the successive forcings to which they have been subjected by means of this chemical agent called alcohol, and the product of feeling and emotion which they yield is therefore deteriorated in quality.

You know that the intellectual product is also deteriorated, but we are at present confining our attention to the effects of alcohol upon the moral nature, that is upon the feelings or emotions; and we know that these are slowly but steadily degraded by this agent. At least every one of us who has had occasion to watch in ourselves or others the effect of the long continued steady use of alcohol, knows this well—too well. But alcohol, besides its primary stimulating action has a secondary effect, which is, perhaps, still more important for us to consider, and that is its sedative effect.

As long as the man goes on taking alcohol every day, or every few days, this sedative action of the drug by deadening sensation, hides from him the mischief that has been and is being done; but let him not use any alcohol for a week or two; then the sedative effect passes off, and the unpleasant, even distressing nervous sensations, of which I have spoken, no longer being concealed by the action of the drug, are felt more and more plainly, and they declare in the plainest language the mischief that has been done.

These very feelings which ought to be the strongest warning against the use of alcohol, drive the man to a continued recourse to this agent. This road, once fully entered upon, the end can be predicted in nine cases out of ten. The supposed necessity for the drug becomes greater and greater as the injury which it has done to the nerve centres grows more and more, and the man sinks downward lower and lower to a drunkard's death. If, on the other hand, the man, awakened in time to a sense of his danger and to a realization of the losing game that he is playing, abandons the use of all alcoholic liquors, then the disagreeable feelings of which I have spoken, gradually fade away; but no

man who has used alcohol, even in moderate quantities for several years, will be fully restored to his healthy natural feelings within a less time than from six months to a year after he has given up the use of it; and the effect of the alcohol may last much longer than this—many years, or the rest of the person's life, in proportion to the quantity of alcohol that has been taken, the length of time the person has taken it, and the age at which it is abandoned.

It is my opinion, after long and careful observation and thought, that it will take a healthy system at least six weeks to recover fully from the excessive use of alcohol for one day. No one denies that alcohol taken in quantities sufficient to produce moral exaltation for say a part of every day for several years, does injure the moral nature of the person taking it, that such a person is more prone to hate and fear than he was before he began to use the alcohol, and that his capacity for affection is materially lessened. But it is plain that this effect is produced gradually, and that since years of excess produce so great a change in the man, days of excess must produce a proportionate amount of injury.

We know that alcohol is capable of producing happiness. Is there not then some way by which we can secure the happiness it is capable of affording, without paying for it more than it is worth? If we could do this we should be really making use of alcohol, that is, we should be getting something out of it over and above what we have to pay for that something, just as we do in the case of food, or as in the case of our natural affections. All these we work for and in some sense pay for, but the happiness or pleasure they afford us, is out of all proportion to what they cost us. Could we not also in the case of alcohol so use *it* that the pleasure it is undoubtedly capable of affording, could be enjoyed at such a price that after it was paid for, a margin of profit would be left?

Well, let us see. In the first place it is certain, from the nature of the case, that any moral exaltation derived from alcohol, must be followed sooner or later by a corresponding moral depression. This is proved by universal experience, and I have never heard it denied by any man who

had given alcohol a fair trial. But it is also proved by scientific considerations, quite apart from experience; for science shows that alcohol does not supply any of the energy which it causes to be evolved by the organism, when it is taken into it. But if it evolves no force itself, then when it causes an unusual amount of force to be given out by any part of the organism, it must leave that part of the organism more or less exhausted when its effect has passed off, and this is exactly what we find to be the fact. It is capable of the clearest proof, therefore, that alcohol cannot be profitably taken, even if it left behind it no permanent injury to the nerve centers, and when we come to reckon this injury along with the discomfort of the depression immediately following its use, we begin to wonder how it is that men continue to take a drug, the disagreeable effects of which, are so immensely out of proportion to its agreeable effects.

Men take alcohol at first because its effect is pleasant. After taking it for some time, and finding that they are paying the full price in discomfort for any pleasure they are getting, they go on taking it because they find that they have not the same nervous systems with which they started in life, and that without alcohol they are not comfortable.

They say: It agrees very well with such an one to abstain from alcohol, but *my* constitution is different from his; it does not suit *me* to go without alcohol. This is true; they have made for themselves such a modified constitution that without alcohol they suffer. This fact, which alone ought to make them drop alcohol as they would a poisonous serpent, makes them continue to use it. Then after still another period of a few years, more or less, when all doubt is gone, and they see that alcohol does not, after all, suit their constitution, but that it is killing them—at this stage, the most lamentable condition to which human nature is liable, alcohol has ceased to give any pleasure, but it must be taken to ward off for a few hours or a few minutes the intolerable misery of a completely shattered nervous system.

TRANSLATIONS.

SPASM OF THE URETHRA.¹

BY PROF. DR. F. ESMARCH.

Translated by Dr. E. Evers, St. Louis.

Gentlemen:—Allow me to direct your attention to-day to a branch of nerve- and muscle-pathology, which, in my opinion, has been very much neglected hitherto: I refer to spasmodic affections of the muscles of the urethra.

Although John Hunter already asserted that spasmodic contractions of the muscular fibres of the urethra were of frequent occurrence, and not infrequently led to complete retention of urine, yet the opinions as to the frequency of spasm of the urethra differ widely at the present day. Most German and English surgeons regard spasmodic retention of urine as something extremely rare, while our French colleagues assert its frequency. When we compare the modern German handbooks of surgery, we find that they all speak of this condition with a certain degree of reserve; even Dittel, with his large experience, says in his latest work on strictures of the urethra: "It is certain that spasmodic strictures of the urethra occur very rarely, much more rarely than they are diagnosed, and I, myself, have not been fortunate enough to observe more than one case of this kind." When we read his book carefully, however, we find more than one case of spasm of the urethra recorded therein.

The writings of Guthrie and Brodie, on diseases of the urethra, contain one case each of spasmodic retention, as something very rare; the celebrated English Surgeon, Sir Henry Thompson, who devoted a very explicit and interesting chapter to this subject in his older work, says in his latest excellent

¹ Lecture delivered on the third day of the session of the VIII. Congress of German surgeons, at Berlin, April 18, 1879.—*Langenbeck's Archiv. Bd. xxiv. Heft. 4.*

lectures on diseases of the urinary organs: "Spasmodic retention occurs rarely and merits no further discussion;" and again: "I will state here what spasmodic stricture often is. It is an excellent excuse when we fail to pass an instrument—it is a refuge for incompetency."

In short, an examination of the literature on this subject, leaves a very unsatisfactory impression, as though a teacher informed his students: "This condition is extremely rare: I believe I have observed it several times, but I am not sure that it was not something else."

Gentlemen! My experience justifies me in asserting, that spasm of the urethra is of very frequent occurrence, and that it is a common, if not the *most* common cause of retention of urine.

Scarcely a session passes that I can not demonstrate this condition before my audience "*ad oculos*." For example, during the winter-session I have observed nine cases of this kind, in two of which the careless introduction of the catheter had caused false passages, and in one of which death resulted from pyemia, originating from one of these false passages.

Very frequently this condition is not recognized, and, consequently, not treated properly, though it is not difficult to make a correct diagnosis, as I shall show you presently.

Even a moderate degree of spasm of the urethra is frequently mistaken for stricture. I have often met with cases, which had been treated for some length of time by good surgeons,¹ as strictures, and in which even urethrotomy had been proposed on account of the persistency of the affection, when yet the first examination proved that they were merely spasmodic contractions. Spasm of the urethra is rarely an idio-

1 One of my colleagues once sent me his son, a gardner, aged twenty-two years, who had had some urethral trouble for about a year, which appeared to indicate a stricture, though he had never had gonorrhea. His father, as well as another physician, had diagnosed a stricture of the *pars membranacea*, and had treated it with bougies for some length of time without relieving him. I could introduce a large, silver catheter without difficulty, and in doing so detected the spasm of the *pars muscularis*, which was soon and permanently relieved by antispasmodic treatment (opium-suppositories, warm baths and the frequent introduction of the catheter.) I learned that the trouble had been caused thus: frequently when overheated by work, the patient would sit down upon the damp ground, while breakfasting.

pathic affection; in most cases it is but a symptom of some other disease, which, it is true, we can not always discover. He who has once recognized the affection, will soon learn that it varies in degree from an insignificant impediment in urinating, to complete retention of urine, and that the patient's own account of his case, is generally sufficiently characteristic to indicate the presence of spasm of the urethra.

At the commencement of the disease, the symptoms are not very severe; the patients notice that it is a little more difficult to begin, and that it takes a longer time until the stream makes its appearance; the stream is feebler, thinner, bifurcated, just as in organic stricture; the last drops are expelled without any force. Patients often complain of burning pain at the beginning and close of urinating, not during the act. This pain often becomes so severe as to suggest the presence of stone in the bladder; frequently it becomes so excruciating, that the patients scream out aloud, contort themselves and assume every possible position to facilitate the evacuation of urine. These pains are often accompanied by radiating pains into neighboring organs, as, for instance, the rectum, vagina, thigh and region of the kidneys. These are the cases which are described as neuralgia of the neck of the bladder, (*neuralgia recto-vesicalis*, *vesico-vaginalis*, *contracture douloureuse du col de la vessie*.)

We find analogous conditions in the closing apparatus of other cavities of the body, especially near the outlet of the pelvis. The resemblance of spasm of the urethra to the painful spasm of the anus and to vaginismus is apparent.

This condition may persist in greater or less degree for years.

Generally, complete retention only results when other disturbing causes are added, (as cold, errors of diet, too frequent coitus, etc.)

The diagnosis of spasm of the urethra is not difficult for him who knows how to use the catheter. We should make it a rule, however, always to use a large, metallic catheter in examining cases of this kind. If we take a small instrument, under the impression that we are dealing with a stricture, its fine point will irritate the mucous membrane of the urethra, increase the severity of the spasm, and add to the danger of forming a false passage. In making the first examination of any urethra, I always use a large, silver catheter, No. 20, of the French scale, which is 20 mm. in circumference, (No. 12 English scale.) When

the spasm of the urethra is more severe, we find, on introducing the catheter into the *pars spongiosa* a peculiar resistance, as if the catheter had not been oiled well, or as if we were trying to pass the instrument through a rubber tube which is a little too narrow. This resistance is undoubtedly due to reflex, spasmodic contraction of the circular fibres of the urethra, for, if we put the patient under chloroform, the spasm disappears instantly, and the catheter passes on to the *isthmum urethræ* by its own weight. The real difficulty begins right here at the narrowest point, where the urethra passes through the anterior layer of the deep perineal fascia (*ligamentum triangulare*; *diaphragma uro-genitale*; Henle,) where the *pars bulbosa* passes into the *pars membranacea*. I prefer to call this latter part *pars muscularis*, because it is in fact supplied with a powerful muscular apparatus, and as this muscular apparatus is the seat of the disease I speak of, allow me to refer a little more in detail to the anatomical and physiological relations of this part.¹

The muscular sack, which we call the bladder, consists of the muscular layer of the detrusor and the mucous membrane which lines it interiorly. At its outlet we find a thick muscular ring, which we call the prostate or vesical sphincter, and which, like the detrusor, consists of smooth, organic, involuntary, muscular fibres. In man, numerous glands are imbedded between these muscular fibres. Both the detrusor and sphincter are always in a condition of active, tonic contraction; (Henle); the detrusor is always closely contracted, over the contents of the bladder; but as the sphincter, owing to its larger mass, is stronger than the detrusor, it prevents the escape of urine even after death.

The evacuation of urine is dependent upon the following three factors.

1. *The pressure of the accumulated fluid.*—As soon as this reaches a certain degree, it irritates the sensitive nerves of the mucous membrane of the bladder, especially those in the *trigonum Lieutaudi*, and we feel the desire to urinate.

2. *Abdominal pressure*, which is under control of the will, and which is called into action by our desire to urinate.

3. *The contraction of the detrusor*, which is an involuntary

¹ The part here omitted, refers to the elegant plate accompanying the original.—TRANS. NOTE.

reflex motion, caused by the irritation of the mucous membrane through the ganglia, partly of the *plexus hypogastricus inferior* partly of the *centrum vesico-spinale* of the spinal cord, which is situated between the third and fifth lumbar vertebrae.

The external, longitudinal layer of the detrusor, passes vertically into the ring of the prostate, and therefore opens this ring when the detrusor contracts over the fluid in the bladder.

The urine now passes through the *pars prostatica* into the *pars muscularis*; but here the further escape of urine may be prevented by voluntary or spasmodic contraction of the urethral muscles; when these, too, yield, then the urine escapes; but its discharge may be arrested at any moment by the contraction of these muscles.

The opinions of anatomists as to the position, arrangement and action of the muscles here concerned, have always varied very much. From the time of Albinus, Santovini and Guthrie, to that of Joh. Müller, Luschka and Henle, the most varying descriptions have been given of the muscles concerned in the compression of the *pars membranacea* of the urethra. All authors agree that the space between the two layers of the deep perineal fascia, which, with Luschka, we may best designate as *capsula pelvis urethralis*, contains numerous muscular fibres, the course of which can scarcely be shown by dissection, but the contraction of which, compresses the muscular part of the urethra in this space. The simplest way to think of these muscular fibres, is to think of them as two narrow, flat muscles, spread out between the *ramis ischio-pubicis*, one of which (*compressor urethræ*, Guthrie), is situated above the urethra, the other (*constrictor isthmi urethræ*, Müller), below it. When these muscles contract, they compress the urethra as the clamp does the rubber tube. It will be most to the purpose, therefore, to retain the appellation of Guthrie, *compressor urethræ*, for both these muscular skeins. Besides these, we also find about this part of the urethra, a layer of considerable thickness, of transversely striated, circular muscular fibres, (*stratum circulare*, or *sphincter urethralis*), which also narrow the urethra when contracted. The nerves which supply this muscular apparatus, are derived partly from the *nervus pudendus*, (which responds to irritations of the *pedunculi cerebri*), partly from the *plexus hypogastricus* of the sympathetic. Thus it appears that the contraction of these mus-

cles may be produced by the brain under control of the will, and by reflex action through the ganglia of the spinal cord or of the *plexus hypogastricus*.

If the powerful muscular apparatus here described, is in a state of spasmodic contraction, it will undoubtedly prevent the escape of urine, and will offer considerable resistance to the passage of the catheter. In this way a sudden and complete retention of urine may be caused, and if the spasm be reflex, the irritation caused by the accumulation of urine in the bladder will increase it, until we can not hope for spontaneous relief. On the other hand, the resistance offered to the passage of the catheter is never such that it can not be overcome by an educated hand. The spasm can never be an excuse or a refuge for incompetency, as Thompson says, if we fail to pass the instrument. How this is to be done, I will explain, if you will allow me to continue the description of catheterism which I have just interrupted.

When the point of the catheter has arrived at the *pars bulbosa*, we must attempt to pass it through the opening in the anterior layer of the deep perineal fascia (*ligamentum triangulare*), in which the urethra is fixed. For this purpose, the penis should be drawn well up on the catheter before the handle is raised, because, generally, the sphincter ani is also spasmodically contracted, and thus the *pars bulbosa*, which is connected to the sphincter by the *centrum tendineum perinei* is drawn backward, causing the point of the catheter to impinge beneath the opening, unless the curvature of the urethra is diminished by traction. This is the point at which false passages are generally made, when an inexperienced hand endeavors to overcome the resistance by force. The point of the catheter perforates the lower part of the urethra and the *ligamentum triangulare*, and passes with a perceptible jerk into the cellular tissue between bladder and rectum.

When with care and caution, we have brought the point of the catheter to the isthmus, then we encounter the resistance offered by the spasmodic contraction of the muscles. A delicate touch can readily distinguish the resistance here offered, from that of an organic stricture, and if, at this moment, we apply a finger of the left hand to the perineum, we often can feel the fitful contractions of the muscles of this part. Here then, we must proceed with the greatest care and caution. The

least exertion of force increases the spasm. If, however, we hold the catheter lightly between two fingers, allowing the weight of the instrument alone to act, and wait patiently ten minutes or more, we gradually find the resistance disappearing and the instrument gliding slowly forward; little by little we can depress the handle, until we suddenly feel the catheter passing into the bladder with a perceptible jerk. At the moment when the point of the catheter passes the *pars muscularis*, the patients generally experience a desire to urinate in some, however, the urethra is so excessively sensitive, that they complain of the severest pain, scream, kick, throw about their arms, and thus increase the danger of injuring the urethra. In such cases, it is advisable to put the patient under chloroform, and when the narcosis is complete, we find that the resistance has totally disappeared, not only in the *pars cavernosa* but also in the *pars muscularis* and *prostatica*. The catheter passes into the bladder without any resistance whatever.

It is evident that these are not cases of organic stricture, nor of inflammatory swelling of the mucous membranes of the urethra, (Thompson.) The former would not allow an instrument of such thickness to pass; the latter might be overcome by gradual pressure, but it would not disappear suddenly under chloroform. We also miss a characteristic symptom of stricture; that the catheter is grasped tightly when we endeavor to withdraw it. When the spasm of the muscles has been overcome by the introduction of the instrument, they are completely relaxed and the catheter may be withdrawn without any resistance whatever.

When we inquire into the etiology of spasm of the urethra, we find that it is caused by vastly different conditions.

Certain psychical influences may favor or retard the discharge of urine. Fear, especially, may, under certain circumstances, produce the purest form of spasmodic retention of urine, a fact which the greatest sceptics will admit.

Guthrie tells of an attorney, who suffered with retention of urine whenever he had to plead an important case. Sir Benjamin Brodie relates the story of a clergyman who was similarly affected before preaching, and Dittel speaks of a student, who suffered from the same affection before examination. Dittel also relates, at length, the case of an attorney who was twice affected with spasmodic retention of urine, when about to

enter upon a journey, and who was relieved by the introduction of a large catheter.

Nearly all students are aware of the fact, that at clinical lectures, many patients are unable to urinate while the eyes of the audience are directed to their penis. The reverse is also true, that fear often produces the opposite effect—involuntary discharge of urine. I need but to remind you of the celebrated picture of Rubens, “the eagle of Jupiter carrying off Gany-mede.”

It is well-known that psychical influences act similarly upon the bowels. Fear and fright often produce very uncomfortable involuntary discharges from the bowels. The reverse is true likewise. I am acquainted with a gentleman who is unable to procure a discharge from the bowels while the water-closet on the floor above him is occupied by another person.

Spasm of the urethra is much more frequently produced, as a reflex action, by strong irritation of the neighboring nerves.

You may not all be aware of the fact, that excessive sexual intercourse or masturbation will often cause very painful spasms of the anus and of the urethra, which last for hours. Every surgeon knows that we frequently find spasmodic retention of urine after major operations in the vicinity of the urethra, especially after amputations, resections and exarticulations of the thigh, after operations for fistula in ano, hemorrhoids, fissura ani, etc., etc. The spasmodic retention often disappears upon the exhibition of antispasmodics, but most frequently demands the introduction of the catheter. The cases of retention of urine from the action of cold (as sitting on a cold stone or on a wet seat) belong to this same class,—they are sometimes described as rheumatic ischuria. The retention caused by irritation of the mucous membrane of the intestines (by ascarides or tapeworms, for instance) is of the same character. A striking case of this kind is related by Tuffnel, in which the obstinate symptoms of stricture of the *pars membranacea* disappeared immediately on the expulsion of a tapeworm, thirty feet long.

Most frequently, however, reflex spasm of the urethra is caused by local irritation of the mucous membrane of the urinary organs.

It may be a subject of dispute, whether or not the sudden retention of urine in inflammations and irritation of the urethra, prostate or bladder is dependent upon a swelling of the mucous membrane or upon reflex spasm of the muscles of the urethra.

Thompson maintains that the "so-called inflammatory or spasmodic stricture" is caused by an inflammatory swelling of the prostate, and compares it to the sudden swelling of the tonsils in catarrh of the pharynx. I am of the opinion that in most of these cases also, it is a reflex spasm, which can only be determined by the careful introduction of the catheter, which should always be employed. It is evident that Thompson himself felt that there was some sort of spasm, for he says: "In retention of urine depending upon organic stricture, hot baths and opium may be resorted to, if we do not succeed in introducing the catheter;" and again, "if we are convinced that we can not accomplish anything by the use of the catheter, but may do harm, then it will be proper, in most cases, to resort to the use of opium and chloroform in conjunction with hot baths and fomentations."

Very obstinate and extremely painful spasms occur in tubercular ulcerations of the mucous membrane of the bladder and urethra. In all probability the sudden occurrence of retention of urine after injections of strong solutions of nitrate of silver to "abort" gonorrhea is spasmodic in character. However, it does not require any inflammatory condition to produce reflex contraction of the urethra by irritating the mucous membrane; in many instances the composition of the urine will exercise an irritating influence.

The best known example of retention of urine of this class, is that which is produced by the immoderate indulgence in young beer or sour wine, and which is known among students as "cold piss." The fact that these conditions are generally relieved promptly by some strong counter-irritant (by cold sitz-baths or by pressing the buttocks against a cold wall) is proof of their spasmodic character. Sudden strangury after the use of cantharides, turpentine and ergot, most frequently depends upon spasm of the muscles of the urethra. We know that in diabetes we frequently find spasm of the urethra; according to Dittel $\frac{7}{10}$ per cent. of sugar in the urine is sufficient to produce "the symptoms of stricture."

A very acid urine, such as we find in arthritis and pyelitis, may produce spasm of the urethra. Thompson says: "all the symptoms of stone in the bladder (except the actual touching of the stone with the sound) and all the symptoms of stricture may be produced by an unusual acidity of the urine." I remember that, when in Paris in 1852, attending a course on diseases of

the bladder and urethra by Monsieur Caudmont, I heard him tell us that old Roux, then still living, frequently declared in his clinic that those intending to operate for stone, should always have a stone in their pocket, as they may not find one in the bladder. He added that the accident had happened to Roux himself several times, when he had mistaken "*a contracture du col de la vessie*" for stone in the bladder. All untoward symptoms, however, disappeared permanently after the lateral operation for stone.

We all know that retention of urine often depends upon injuries of the spinal cord, which is explained as paralysis of the detrusor or of the abdominal muscles. When the catheter is not applied, the distension of the bladder becomes so great that it causes the urine to dribble away rather than to overflow, and then the paralysis of the detrusor does not suffice to explain the condition. But we must assume that the *constrictor urethræ* is in a condition of spasmodic contraction, (Budge) caused by increased reflex irritability. A similar condition is demonstrable at the anus. We find the same condition in inflammations of the spinal cord and the spasm of the urethra is frequently the precursor of severe symptoms of disease of the cord. A striking example of this kind is related in the *Lancet*, of May 28, 1878. A woman had suffered with a tumor of the abdomen, which for two years had been regarded as ovarian dropsy, until, one day, six kilogrammes (12.6 pounds) of urine were drawn off with the catheter. In this case the spasm of the neck of the bladder was the precursor of an attack of paraplegia, which was fully developed shortly before her death.

There are many other morbid conditions which under certain circumstances may produce spasms of the urethra. Disturbances of the digestion, diseases of the liver, may cause retention of urine, which disappear when the disease is cured. Brodie relates a case of intermittent retention of urine, which was relieved by the exhibition of a few doses of quinine.

Spasmodic retention of urine is so common in hysteria that all works on the diseases of the urinary organs as well as those on hysteria contain remarkable instances of this class.¹

¹ I am at present treating a very nervous young girl, who menstruates well and is still a virgin, for the *ligamentum hymenale* renders the outer opening of the vagina as narrow as the urethra. This young person had suffered

As regards the treatment of spasm of the urethra I must be brief, as I have already detained you too long. The old treatment of retention of urine by opium and hot baths is effective in very many instances, and when such is the case, we may reasonably assume that the cause of retention was a spasm of the muscles; for opium and hot baths are certainly antispasmodics. In retention of urine, after major operations about the pelvis, I generally employ a suppository containing 0.05 opium ($\frac{5}{8}$ grs.) and a warm poultice over the region of the bladder; this treatment is generally followed by spontaneous discharge of urine. I never rely upon antispasmodics, however, when the retention continues more than twelve hours, for the excessive distension of the bladder too frequently endangers its subsequent function.

with difficulty in urinating for some time, especially during menstruation and the catheter was frequently employed. Internal medication failed to give relief. Her attendants thought of stone in the bladder, and I was called in consultation. I found no stone, but in introducing the catheter, found a peculiar stiffness and hardness of the urethra and the bladder. The resistance offered to the introduction of the catheter and the firmness with which it was grasped, at first suggested an organic contraction. When the instrument reached the bladder, the urine to the last drop, escaped in a powerful stream, though the girl was lying on her back. It was evident that the bladder possessed sufficient contractility, and the retention of urine was not due to atony of the organ. I endeavored to overcome the spasm of the urethra and of the neck of the bladder with baths and injections, but above all by daily introducing bougies, gradually increasing in size, and allowing them to remain for five minutes at a time. The presence of the bougie caused sufficient contraction of the bladder to force out both some urine and the instrument. Several times in the course of the treatment, there was retention of urine, but the urine was always discharged through the catheter in a full stream. The reaction of the urine was normal, and after each evacuation of the bladder, the girl was perfectly well. On the fifth day the retention of urine continued for twelve hours before the catheter was introduced. The bladder extended to the umbilicus; the urethra was more yielding than during the first few days, and yet the contractions of the bladder, powerful though they were, were not able to overcome the resistance. Spasmodic contraction of the urethra was the only trouble. It yielded to the above treatment and the functions of the bladder became normal. In such cases the introduction of the catheter requires more care than authors generally advise. The firmness with which it is grasped, renders its introduction very difficult, and extremely painful, unless done slowly. In two cases, the resistance was so great, that the attending physicians abandoned the attempts to introduce the catheter, for fear of causing a false passage. It is not sufficient to cure such patients, but they must continue under observation, as this kind of retention of urine has a special tendency to return.

In these cases the introduction of the catheter is always indicated; I repeat, however, that we should always employ a very large catheter and that we should introduce it with extreme care delicacy and patience. If the spasm does not soon disappear, or if the introduction of the catheter causes unusually severe pain, chloroform must be administered. We shall find that the resistance disappears as if by magic, as soon as complete narcosis ensues.

If there is not complete retention of urine but a more moderate degree of spasm of the urethra, the cause should be ascertained and removed. If the urine be too acid, for instance, the acidity should be overcome by the administration of alkaline water or *inf. rad. graminis* (Thompson). General irritability is best relieved by suppositories of opium or other narcotics, (belladonna, hyoscyamus) which should be introduced at night, and by warm baths before going to bed. The internal administration of bromide of potassium and camphor is often of good service.

The main resource, however, is the frequent employment of the catheter, the frequent introduction of bougies to blunt the irritability of the mucous membrane; the best instruments for this purpose are the thick, heavy, smooth tin bougies, which are introduced once a day, and allowed to remain for a few minutes. Le Grand has designated this action a "massage" of the urethra, and the comparison is by no means a bad one, as "massage" of the body is one of the most effective means of quieting general nervous irritability. We may aid the action of the bougies by cold douches to the perineum, or by the use of Winternitz's psychrophor, by which a temporary diminution of temperature is produced in the urethra. These remedies certainly act more satisfactorily and more agreeably than the blisters to the perineum, recommended by John Hunter.

In very severe, painful and obstinate cases of spasm of the urethra, external urethrotomy has been resorted to; besides, in the cases of Roux, already referred to, the operation has been performed with the best results by MacCraight, Bouchardat and Ferguson. This operation, in which the spasmodically contracted muscles of the urethra are divided, corresponds to the sphincterotomy introduced by Boyer to relieve painful spasms of the anus. The latter operation has been superseded by the equally effective method of forcible dilatation of the anus accord-

ing to Recamier and I should recommend the forcible dilatation of the urethra as preferable to the surgical division of the urethral muscles. In several cases I have attained the happiest results by forcibly dilating the *pars muscularis* with a Holt's dilator in narcosis, and by increasing the dilatation by repeated introduction of large size bougies.

TWO CASES OF PNEUMO-MYCOSIS ASPERGILLINA.

BY BOTHER AND WEICHELBAUM.

Pneumo-mycosis produced by aspergillus has been described by several authors. In all the cases hitherto given, death has been the termination.

CASE I.—Female, æt. 63. After an attack of pneumonia, signs of bronchitis persisted, and the apex of the lung became indurated. At the end of six weeks there were found in the sputa, besides leucocytes, epithelial cells and blood corpuscles; also, grayish, glistening particles formed in part of elastic fibres and of spiral bundles, the mycelium of a fungus with rounded spores. The conidia were free, or borne upon their supports, radiating in different directions. The nature of the fungus is evident, it is the aspergillus niger. The spores had probably entered the lungs in the inspired air, and finding upon the inflamed surfaces a favorable nidus, had germinated and produced a certain amount of disintegration of tissue. The fungus gradually disappeared in the sputa, and at the end of a month there was none to be found. Patient recovered completely.

CASE II.—Female, æt. 81, died from an attack of pneumonia. In the anterior part of the lung a space 4 to 8 cm. in diameter, quite firm, and of a dull reddish color. It is composed of dilated air cells, whose walls are riddled with the mycelium of aspergillus. The mycelium is ramified with numerous prolongations. It has invaded, not only the walls, but also the cavities of the alveolæ. In the anterior of the affected space,

the bronchioles are found to be especially selected by the fungus, and their cavities abound in the sporophores.

Weichelbaum believes, contrary to the opinion maintained by Fuerbriger, that aspergillus may develop in healthy lungs.—(*Gazette, Hebdomad.*, Jan. 23, 1880.)

OPHTHALMIC LESIONS PRODUCED BY COLD.

BY M. GALEZOWSKY—*Society of Biology, Paris.*

M. Galezowsky contributes a communication upon alterations of vision which he believes are to be attributed to the action of extreme cold. These affections are of three varieties: Necrosis of the cornea, supra-orbital neuritis, and cerebral affections of inebriates.

Necrosis of the Cornea.—The cornea having no vessels of its own, and deriving its warmth entirely from the aqueous humor becomes chilled more readily than any other of the ocular tissues. The corneal nerves, again, which are very numerous, and at the same time quite superficial, yield speedily to congelation, and partial necrosis of the cornea results. Under the influence of this morbid process, a large superficial ulcer appears in the cornea, most frequently at its centre. It has generally a shining surface, is half-transparent, and but slightly sensitive to the touch, in which respect it resembles a scald. The disease declares itself suddenly; the patient at first does not suffer; little by little the eye becomes injected; an intense iritis takes place, and if the process be not arrested, hypopyon occurs.

In such a case, the ulcer may be made to cicatrize in a few days and the eye to return to its normal state, through the use of warm compresses and the alternate instillation of atropine and eserine.

Supra-orbital Neuritis.—The supra-orbital nerve is relatively less protected than the other nerves, especially in some persons. It is consequently, liable to be attacked by cold. When a neuritis arises with most intense peri-orbital neuralgia, vapor

baths, and vesication over the course of the nerve, promptly relieve the complaint.

Cerebral and Ocular Disorders in the Inebriated.—This form of disease of the eye appears as a sequel to cerebral congestion after exposure to cold, especially among drunkards.

An intoxicated person exhibited grave cerebral symptoms after prolonged exposure to excessive cold; he remained forty-eight hours unconscious, and when the meningeal symptoms disappeared, an incomplete paralysis of the third pair was noted.—(*Gazette, Hebdomad.*, Jan. 16, 1880.)

ON IDIOPATHIC ABDOMINAL PULSATION.

By DR. MACARIO, (*Gazette de Paris.*)

Translated from Schmidt's Jahrbücher, Dec., 1879. By R. LUEDEKING, M. D.,
ST. LOUIS.

Either sex may present this form of disease, the male, however, being more subject to it. No case younger than eighteen years is thus far on record, none older than sixty. Macario describes one case aged eighteen years, four cases from twenty to thirty, five from thirty-one to forty, three from forty-one to fifty, two from fifty-one to sixty years of age. A nervous temperament and a delicate constitution predispose. Direct causation may be found in psychical affections, suppressed menstruation, suppression of an habitual epistaxis, or hemorrhoids, gastric disturbance, malarial influence, pregnancy—in one case the symptoms presented themselves in successive pregnancies beginning each time in the third month of gestation. In one case, M. saw a recurrence in five successive years after threshing, and attributes it to inhalation of dust.

The pathognomonic symptom of the disease, is a more or less violent pulsation of the abdominal aorta; disturbed digestion, gastric pain, singultus, nausea, vomiting, pain in the lumbar or hypochondriac regions, palpitation of the heart, are pro-

dromic signs. The pulsation extends from the ensiform process to the umbilicus, or even down to the bifurcation of the aorta. The pulsation may be readily felt, an undulatory motion of the abdominal parietes is visible. Auscultation reveals no bruit. The pulsation is synchronous with that of the heart and radial pulse. The latter may be weak and hardly perceptible, while the pulsation of the aorta is intense. Close examination by palpation does not reveal a change in the caliber of the aorta. Other writers, however, report an epigastric tumor that comes and goes. Compression of the abdominal aorta temporarily cuts off the pulsation.

The pulsations are extremely disagreeable, and greatly depress the patient. Pronounced pain does not exist as a rule, though some complain of painful sensations in the region of the umbilicus, the hypochondria or the lower extremities. The alimentary tract is often tympanitic with gases, and such a condition aggravates the symptoms. After a time, symptoms of nervous prostration present themselves—loss of appetite, insomnia, frightful dreams, headache, dizziness, tinnitus aurium, neuralgic pain in forehead and temples, visual disturbance, hyperæsthesia of the skin, etc. One patient suffered from priapism, another had repeated attacks of syncope; a lady experienced the sensation of a huge ball in her abdomen; in two cases saliva was profusely secreted. The tongue is usually coated, taste bitter; there are nausea and constipation; the patients feel weak, the extremities are alternately hot and cold and may be edematous. The urinary organs are not disturbed; one case perspired profusely.

The course of the disease is irregular; the pulsation may come on suddenly or be preceded by the above mentioned symptoms. The duration is indefinite, the attack lasting in most cases several days. In one of M's. cases, the trouble had existed for twenty months, in two cases for over two years.

As regards the prognosis, no case is known that resulted in death, but long existence of the disease, may lead to mental derangement, even to suicide.

The disease in question is essentially nervous in nature resulting from an anomaly of innervation in the vasomotor nerves of the abdominal aorta. The disease is a *local neurosis*, and not, as Vigla says, a symptom of hysteria or chlorosis.

The affection has been treated by bleeding, purgatives and

antispasmodics. M. recommends hydrotherapy as a most effective method of treatment, and condemns bleeding, inasmuch as the patients are usually of delicate constitution; only in cases of a strong, plethoric habitus, where congestion of the brain is to be feared, he would bleed or purge. Saline purgatives or an emeto-cathartic may effect a rapid cure; in anemia iron should be given. Castoreum, camphor, valerian, ether, opiates are indicated by conditions of mental exaltation; insomnia, atonic condition of the bowels, flatulence demand carminatives, amara, etc. M. orders cold ablutions and douches followed by bodily exercise several times a day, and has observed rapid and lasting change for the better. An active, busy mode of life, generous diet and proper mental diversion, may contribute to permanent relief.

THE ENTIRE UTERUS TORN OUT BY A MIDWIFE IN ATTEMPTING
TO REMOVE PLACENTA. RECOVERY.

E. Schwarz reports (*Archiv. f. Gynækol*) an extraordinary case, in which the midwife while attempting to remove the placenta with her hand, must have driven the fundus upward with such force as to tear it from its vaginal attachment. Tampons of batting saturated with salicylic acid were introduced into the vagina to support the bowels. The patient was free from fever in four days and by the twenty-first day was completely recovered. Exploration discovered cicatricial closure of the upper part of the vagina. Subsequently, perfect health, only marked polydipsia, which lasted three-fourths of a year.—*Berlin. Klin. Wochenschrift. Jan 19, 1880.*

REPORTS ON PROGRESS.

MONTHLY REPORT ON THE PROGRESS OF THERAPEUTICS.

Mercuric Bichloride in Dysentery and Diarrhea.—REED finds the bichloride of mercury especially valuable in those cases of chronic diarrhea characterized by dysenteric symptoms, such as the presence of mucus or blood in the stools, with or without tenesmus. In acute cases it is slow in acting and has been much less successful. He prescribes $\frac{1}{100}$ grain doses every two hours, though in one case, when a patient found the frequency of the dose inconvenient and on his own responsibility took treble the dose before each meal, the improvement seemed quite as prompt and decided. He dissolves one-half grain in six fluid ounces of distilled water and gives teaspoonful doses of the solution.—*Philadelphia Medical Times*, Jan. 31.

Inhalations in Pertussis.—J. LEWIS SMITH treated several cases of whooping cough in the quarantine wards of the New York Foundling Asylum with inhalations of the following mixture:

R. Acidi carbolic, ʒss.
Potass. chlorat, ʒij.
Glycerinæ, ʒij.
Aquæ, ʒvi. M.

The spray was inhaled three times a day and from two to five minutes each time. The results were sufficiently favorable to justify farther trial, although the number of patients with whom the treatment was tested was not large enough to furnish any positive conclusions.

The good effects of the spray seemed to be due principally to the carbolic acid, though in one or two cases where the experiment was made of omitting the chlorate of potash temporarily, the patients seemed to do better with than without it.—*Boston Medical and Surgical Journal*, Jan 22, 1880.

Apium Graveolens in Rheumatism.—Celery has long been popularly credited with decided virtue in the treatment and prevention of rheumatism, and while the chances are that it is without special merit, its trial is advisable. It is only by experiment that therapeutics may be advanced. The celery should be cooked to develop its medicinal quality. That which is not bleached contains the largest amount of essential oil. Stewed, it is a palatable dish, of a delicate flavor, glutinous like okra. It goes well with fowls or game. It is a pleasant addition to soup.—*Louisville Med. News*, Jan. 17, 1880.

Pilocarpin in Night-sweating of Phthisis.—MURRELL has employed with good results, the nitrate of pilocarpin to control night sweats. The usual dose was a twentieth of a grain, and is best administered as a pill formed with sugar of milk. When the sweating is only at night, a dose at bed time seems to do as much good as if it were given three times a day. As a rule, but little improvement was noticed the first night, but on the second and third nights the sweating was much less, and by the end of the week had almost, or completely, disappeared. Pilocarpin acts rather slowly, but is very efficacious. It does not over-dry the skin, but leaves it comfortably moist. It is tasteless, an advantage in the case of children. After the sweating has been checked by pilocarpin, there is, as a rule, no return for many weeks.—*The Practitioner*, Dec., 1879.

Belladonna in Urticaria.—DR. L. C. SMITH gives a full emetic dose of ipecac, and, after it has acted thoroughly, gives fluid extract of belladonna, in small doses, every two hours, until its characteristic flush of the skin, is produced on the face, or until vision is considerably disturbed. This degree of impression should be maintained, gradually diminishing the dose, for two or three days.—*Pacific Med. and Surg. Journal*, Dec. 1879.

Common Salt as an Aperient.—YANDELL habitually used and recommended to his pupils the use of common table-salt as an aperient. A teaspoonful of salt in a glass of cool water half an hour before breakfast will act with most persons pleasantly and promptly. As a rule it acts excellently and without diminution of power as long as it may be employed.—*Louisville Med. News*, Jan. 10, 1880.

Iodine in Typhoid Fever.—BARTHOLOW considers the so-called specific treatment of typhoid fever an improvement upon methods heretofore in vogue. It consists of calomel in ten-grain doses for three or four days during the first week of the disease; and iodine either in the form of tincture or Lugol's solution, which latter he considers preferable; five drops three times a day is the dose given. This treatment is not considered specific on account of any supposed influence directly upon typhoid fever, but from the power of the iodine to destroy the germs of the disease in the discharges of the intestinal canal, on account of its antiseptic properties.—*Boston Medical and Surgical Journal*, Feb. 19. 1880.

Digitalis in Flagging Heart.—DA COSTA recommends hypodermic injection of fluid extract of digitalis, well diluted with water, for the purpose of sustaining a flagging heart. He ordinarily administers two drops of the fluid extract, which is equivalent to fifteen minims of the tincture. When properly diluted this answers well for hypodermic injection.—*Phila. Med. Times*, Jan. 17, 1880.

Eucalyptus in Coryza.—RUDOLPH claims that an acute case of coryza may be cut short within an hour by chewing one or two dried leaves of the eucalyptus, and swallowing the exceedingly bitter and aromatic saliva. In chronic cases no such effect is produced.—*Boston Medical and Surgical Journal*, Jan. 15, '80.

EDITORIAL.

VOL. III.

MARCH, 1880.

No. 3.

SANITARY ORGANIZATION OF NATIONS.

In a paper¹ recently read before the Boston Society for Medical Improvement, Dr. H. I. Bowditch has embodied views on the subject of the sanitary organization of nations, which are well worthy of careful study at the present time.

As Dr. Bowditch is a practical sanitarian of conceded ability, anything which he might say in relation to such a subject would be entitled to attentive consideration, but when the fact is borne in mind that he is a member of the National Board of Health, it may be claimed, not unfairly, that, to a certain extent, he represents that body in the present instance, and gives semi-official voice and form to the opinions and views of the Board on the subject which he so ably discusses.

The author of the paper is chairman of the standing committee of that body on sanitary legislation, which has recently submitted to the Board a compilation of the statutory sanitary laws and enactments of the United States and of the several States, as well as the decisions of the several courts on all questions relating to or involving the public health.

Dr. Bowditch in his paper, sets out with the observation that sanitary science, though of such recent growth, is now fast becoming a most important branch of preventive medicine; and that sanitary organization, in its widest sense, would begin with man as an individual, and terminate in international law, or his relations with his fellows of the whole race. He recounts briefly the efforts that have been made at differ-

1. *Boston Medical and Surgical Journal*, Jan. 8, 1880.

ent times by the several nations to secure concurrent international action on the subject of quarantine, from which it appears that after at least one failure in that direction, the French government in 1857 called an international sanitary congress, which met at Paris, in order, if possible, to obtain a uniform code of quarantine law. All the states and powers having interests or territory on the Mediterranean sea had representatives at the congress. Plague, yellow fever and cholera were defined and international sanitary regulations were drawn up, but were adopted by only five of the states represented in the conference. At the end of five years these five powers gave up the plan, and no further effort was made until 1859, when France again made an attempt, but failed. In the year 1866, in view of the ravages of cholera in the East the previous year, she suggested a meeting at Constantinople, which was held, and at which all the European powers, with Egypt and Persia, were represented; and the results of this conference were of value, to some extent, in the prevention of the spread of the disease.

The Austro-Hungarian government called a congress at Vienna, in 1874, which was not altogether successful,—the cause of failure, in all the efforts, being due to proposed interference with existing rules of quarantine, adopted by different nations.

The paper declares that the time is fast approaching, if it be not already at hand, when such concurrent sanitary action will be a necessity; that every power should establish its own board of health, and that as civilized states combined to put down buccaneering, piracy and the slave trade, so nations may rightly unite in mutual defence against violently infectious or contagious diseases; and that they should also have and exercise the right of enforcing sanitary regulations on slothful powers, and compelling uncivilized states to submit to that amount of sanitary law which may be deemed necessary for the health of mankind.

As a starting point in the establishment of such a code, a consultation between representatives of the various sovereignties is proposed, who, after meeting and discussing general sanitary measures, shall lay down a few simple but broad rules of conduct, to which all the contracting nations would readily agree.

The assent to, or adoption of such propositions by all, or even by a large majority of the represented states, would signalize the commencement of an international code which would admit of indefinite expansion under the experience of years.

A schedule of a plan for a national sanitary organization is presented, which contemplates the existence of an official who shall be known as minister or secretary of health, who shall be a cabinet officer and the peer of all the chiefs of the various departments of government. He should be the presiding genius of the whole movement, and among other qualifications, he should be young, or at least middle-aged, the first sanitarian of the country, and one of its ablest and most honored citizens. He should hold his office from the national executive, and have the right, in great emergencies, to summon sanitarians from various parts of the country for consultation and advice. But as this secretary or minister would at times be called to take prompt action in emergencies, which might involve very large and important business interests, it would seem appropriate, if not actually necessary, for him to have an advisory council near at hand and always accessible, upon whom he could call for advice and support, and without whose active support he could take no important step.

Such a council could be known as a national board of health and, in the United States, representatives of the following departments would very naturally be selected: One from the department of state, one from the army, one from the navy, one from the marine hospital service, one from the department of justice, one from the department of the interior, one from the signal service. These, with two civilians, would make a body of nine persons, representing all the various interests of the country. The secretary of health would be the presiding officer, and would have the full rights of voice and voting possessed by other members. The board should confirm all doings of the secretary, and by a two-thirds vote of the whole board, would have the power to veto any action proposed by him; the board should also direct the inauguration of any sanitary measures which might be deemed best, and instruct the secretary to carry them into effect; and also to lay before them

a quarterly account of his own work, and a statement of the sanitary needs and condition of the country.

One of the most pressing questions, which would demand the attention of such a body at the present time, is the inauguration of a system of international sanitary law; while in its internal relations the board should address itself to the work of promoting and encouraging the formation of auxiliary and subordinate health organizations in states or departments, counties, cities and towns. The relation which such bodies should hold to each other is indicated, and a comprehensive and harmonious system of organizations for the prosecution of sanitary work, under the central authority of the national board, is clearly outlined. The prime object of such organizations should be the suppression of nuisances, and the education of the people in sanitary matters by the dissemination of information in a popular form on subjects relating to the public health.

The paper embraces a consideration of the individual in his relations to himself and fellows, and as a unit in the observance or violation of personal sanitary laws; and concludes with the expression that its purpose will have been accomplished if even a few minds are led to reflect seriously upon the importance of having among nations well devised sanitary organizations, which, beginning with the individual himself, will endeavor to teach him the rules of health, and afterwards will guard him from various dangers to which he may be exposed from his own neighborhood, from the state, the nation, or from mankind, outside of his own people.

As an appropriate conclusion, it may be stated that a joint resolution was introduced into Congress on February 2, authorizing the President to call an International Sanitary Conference to meet at Washington, for consultation and deliberation on the subjects presented in the paper; and that the National Board of Health has recently (February 21) requested all quarantine authorities of the United States to send representatives to the same place, on May 5, to meet with it, for the purpose of amending the rules and regulations prepared by the Board last year, and recommended by it to the State and local quarantine authorities for adoption.

BROMIDE OF ETHYL.

So frequently of late years has death followed the use of chloroform, that in some localities the medical societies have adopted most emphatic resolutions condemning the use of that anæsthetic, and urging the administration of sulphuric ether in all cases where it is desired to produce anæsthesia. In some cases the action of the societies has gone so far as to declare that, in any case of death from the administration of chloroform, the physician is to be considered guilty of manslaughter.

In many of the cases where death has followed chloroform inhalation, only a small quantity of the drug had been used, and every precaution had been taken to secure a due admixture of air. And the fatal cases have occurred as well in the practice of the most cautious and most experienced surgeons as in the hands of men younger and possibly more reckless. So that it has been with increasing reluctance that careful surgeons have made use of this drug by inhalation. On the other hand, the inconveniences and discomforts of the use of sulphuric ether, have made the administration of it irksome to the physician and disagreeable to the patient.

The great desirableness of an anæsthetic which will be efficient and reliable, and at the same time free from the dangers of chloroform and the inconveniences of ether, have stimulated research in this direction, and a number of new anæsthetics have been brought forward from time to time; but none have as yet, to any considerable extent, superseded chloroform and ether.

Bichloride of methylen has been used perhaps more extensively than any other of the new anæsthetics, and has the emphatic endorsement of such eminent authorities as B. W. Richardson and Spencer Wells. It has not, however, fulfilled the hopes that were at first entertained, that it would prove a

perfectly safe substitute for chloroform, as deaths have taken place under its administration.

In 1849 Mr. Nunneley, of Leeds, England, by experimentation upon animals, showed that bromide of ethyl possessed efficient anæsthetic power, and in 1865 he used that agent upon patients undergoing surgical operations. However, it was a very expensive article, and although the experience of Mr. Nunneley in the use of it was entirely satisfactory, it has never come into general use nor been much known.

In the summer of 1877 Dr. Laurence Turnbull of Philadelphia, brought the article before the surgeons of this country, testing it first upon animals, then upon himself and afterwards upon patients.

Dr. Levis, of Philadelphia, has been testing it for some months past in the Pennsylvania Hospital and the Jefferson College Hospital as well as in his private practice, and has been much pleased thus far with its action. In a paper published in the Medical Times of January 17th, he speaks very highly of its value. He finds it free from the tendency to produce cerebral anemia and syncope with cardiac paralysis, which are so often observed in the use of chloroform. It seems to have slight influence upon the circulation or respiration and much less tendency to produce nausea and vomiting, than either of the anæsthetics in more common use. Dr. Levis estimates that complete anæsthesia is accomplished in one-third less time than is the case with chloroform; and, in the greater number of cases, the time of recovery did not exceed two minutes after inhalation had ceased.

It vaporizes more readily than chloroform. The vapor is quite unirritating to the lungs and is, moreover, unflammable, which is a point of practical value in cases where an anæsthetic is to be used at night. The results, so far attained, afford a reasonable *hope* that bromide of ethyl will prove equally efficient with, and far safer than chloroform; but much greater experience than has yet been had, will be necessary in order to determine just how far it can be depended upon. Its cost is now about thirty cents per ounce.

Dr. Byford of Chicago and another surgeon of that city (whose name is not mentioned) have reported to Dr. Turnbull, entire success in the use of the new anæsthetic



SIR HENRY THOMPSON ON THE NIETZE-LEITNER ENDOSCOPE.

Sir Henry Thompson recently visited Vienna, at the invitation of Prof. Dittel, to inspect the practical working of the Nietze-Leitner endoscope, and to determine its value as an aid to the diagnosis of diseases of the genito-urinary organs. The endoscope, which appears to be a marvel of ingenuity, consists of an ordinary-sized silver catheter terminating in a glass extremity, in which is a piece of platinum wire about half an inch long, connected by slender wires with a battery of two tolerably large Bunsen cells. Completing the current, the platinum wire becomes incandescent, supplying the means of illuminating the bladder or other viscus into which it may be introduced. But some means must be adopted to keep the end of the instrument, in which the incandescent wire is, quite cool. This is done by an arrangement permitting the passage of a stream of water from a reservoir, situated above the level of the person operated on, through the wall of the catheter, around the wire at its extremity, and again through the catheter to issue, finally at its end, drop by drop. The proper relations of the parts to each other and to the endoscopic tube, are maintained by means of a movable collar, connected with the near or outer end of the catheter. This collar has connected with it four flexible tubes, two for water and two for the completion of the electric current.

It is necessary to remark that much preparation of the blad-

der is required before the instrument can be used; and some irritation of the organ must be regarded as highly probable, as will be the case with any endoscope. If the urine is bloody or cloudy with mucus, nothing can be seen; the bladder must be washed and then distended with air or perfectly clear water. When there are a few ounces of clear urine present, no such washing is necessary. These precautions being attended to, the tube being introduced, the water turned on and the electric current made, on looking through a central cavity forming the axis of the sound, the operator sees that portion of the bladder adjacent to the distal end brilliantly illuminated. A small pellet of mucus, a piece of gravel, the rugæ and sinuses of the bladder, of natural tint or with an inflammatory injection, are all clearly seen.

Of what value in the diagnosis and treatment of vesical diseases, is this instrument, that is both costly and requires great care and skill in the handling? Sir H. Thompson¹ thinks its field of practical usefulness is not large. He does not regard it as likely to help us in cases of difficult stricture or retention of urine, nor that it can be used to explore a bladder for remaining fragments after the operation of lithotrity. All that is necessary to be done in such circumstances, can be as well done by means at present commonly used, and the use of the endoscope for such, would generally involve additional and unnecessary interference. It may be of use in the detection of sacculated stone as the cause of persistent and unrelieved symptoms; in the diagnosis of pedunculated growths and villous disease of the bladder, removable by operation; and, lastly, in the investigation of the nature, size and shape of foreign bodies, other than calculi, which have become lodged there. He has lately seen a fatal case of vesical growth that might have been easily removed by operation. A precise knowledge of the nature, size and position of a foreign body, might enable us to devise a safe and certain means of removing, in place of a tentative, hazardous and uncertain procedure.

We think it is worth while considering, whether this instru-

¹ *London Lancet*, December 6, 1879.

ment could not also be made available in the detection of the vesical orifice of the ureter, and in the guiding of a small sound into that orifice, thus accomplishing catheterization of the ureter—an operation hitherto considered impossible in the male subject, though Simon claims to be able to effect it in the female. The sound for the ureter might be made to pass through a channel, specially devised, in the endoscopic tube, or it might be pushed up through the recto-vesical walls, as that would place it nearest the direction of the channel to be catheterized. Such a procedure would be worth a great deal in a case where, one kidney having been ruined by obstruction with a renal calculus, the other is suddenly imperiled in the same way.

Giving the endoscope its widest range of practical usefulness, we are still of the opinion that it will be used by very few persons, and these will not be able to do much with it that could not be accomplished by means already at our disposal.



A PECULIAR DISEASE OF THE SKIN.

Dr. Landon of Elbing, Germany, describes in the *Berlin. Klin. Wochenschrift*, Jan. 12, 1880, two cases of skin disease, characterized by peculiar symptoms, and which seem to have their origin in disturbance of the sympathetic system. Case I. Woman; 28 years old, of medium size. General health good, parents healthy. Last child, born May 1878, was well developed, and the mother recovered without complications. Aug. 27, 1878, she worked hard under great exposure for almost twelve hours with brief intervals, and, on the same day, the skin of the left hand became the seat of an erysipelatous swelling. Saturday evening the swelling disappeared. The next morning the right hand swelled in the same way, and remained so until evening. Eight days later the swelling appeared in the left foot and in the

inner side of the left leg as high as the knee. Itching and pain accompanied this last, while itching alone had been previously present; while this swelling abated, the right foot and leg was attacked in the same way and remained so for two days. After a pause of four weeks, without observable cause, a swelling of the mouth occurred beginning at its right angle. Oct. 10th, right cheek and eyelids swollen, the latter to such an extent that the eye could not be opened; while this was disappearing after a day's duration, the left foot, dorsum and sole, was attacked, and at nearly the same time the skin of the left shoulder, which remained painful and swollen for two days. To October, 18th, similar swellings in various parts, with pain in right foot, right buttock; with the latter a distinct erythema nodosum was associated. Until the middle of November, there were no fresh attacks, when the left foot and calf for two days were swollen. Since that time there has been no return of the disease.

The general health during these attacks was scarcely disturbed, there was but little fever, and she attended as usual to her household affairs. During the nights there was a rather profuse sweating, on the well days none. The joints of the affected regions were not attacked. The urine was normal. The whole disease lasted, with intervals of varying length, 10 weeks.

Case II. Man 40 years old, sound body. Took a severe cold, by standing in a draughty place in the open air while bathed in perspiration. A slight chill followed the exposure. The second night after, he had a left-sided pharyngitis with so much swelling of the throat that suffocation seemed imminent; this was relieved by an emetic. The next morning all signs of the pharyngitis were absent. In the afternoon an erysipelatous swelling of the skin of the penis and left half of scrotum with itching and sensation of heat came on, which next day evening disappeared. During ten weeks such swellings appeared at intervals in different parts of the general surface and of the mouth. In the latter part of this period severe bodily exertion seemed to excite an attack. The disease gradually disappeared. Increased warmth, some redness, and a slight itching indicated the latest manifestations. The general health was good; urine normal; night sweats. No fever at all.

Quinine, continuous current to cervical sympathetics and faradisation, in case I. cold water douches,—all had no effect.

Doctor L. considers these cases of disease to be due to spinal irritation consequent upon a cold and over-exertion; which led to a paralysis of the sympathetic system, especially of those branches which are distributed to the smaller arteries. Malaria may be fairly excluded, both on account of the peculiar symptoms and the inefficiency of the large doses of quinine. Other skin diseases can also be excluded.

MORPHINE AND CHLORAL.

DR. H. H. KANE, who has just published a monograph of some 340 pages on "The Hypodermic Injection of Morphia," addresses to the profession the following questions which we gladly publish, and urge our readers to respond fully so far as they have any facts bearing upon the subject:

TO THE PROFESSION.

In order that clearer light may be shed upon some important and still unsettled questions, and for the purpose of adding to the completeness of this work in subsequent editions, the author requests members of the profession *everywhere* to answer the following questions at once:

1. In how many cases of delirium tremens, in what doses and with what results have you used morphia hypodermically?
2. Have you used the drug in this manner in acute inflammatory affections of the respiratory organs, and with what result?
3. Have you used it in acute or chronic renal disease, and with what result?
4. Do you know of any deaths due to the subcutaneous injection of morphia? If an autopsy was held, please state the result.

5. Have you had any serious cases of narcotism from the use of morphia in this manner? If so, please state the condition of the pupils, number of the respirations and pulsations, the amount of morphia used, whether there was any known organic disease, and whether there was any opium idiosyncrasy.

6. Have you had any cases where the drug was thrown directly into the blood? What were the symptoms and what the treatment?

7. In what diseases have you used this method of administering morphia, and with what result?

Dr. Kane also asks the following questions in regard to the use of hydrate of chloral:

1. What is your usual commencing dose?

2. What is the largest amount you have administered at one dose, and the largest amount in twenty-four hours?

3. In what diseases have you used it, (by the mouth, rectum, or hypodermatically), and with what results?

4. Have you known it to affect the sight?

5. Have you ever seen cutaneous eruptions produced by it?

6. Do you know of any instances where death resulted from, or was attributed to its use? If so, please give full particulars as to disease for which given; condition of pulse, pupils, respiration and *temperature*; manner of death; condition of heart, lungs and kidneys; general condition, age, temperament, employment, etc., etc., etc. If an autopsy was held, please state the condition there found.

7. Have you seen any particular manifestations from chloral—as tetanus, convulsions, or delirium?

8. Do you know of any cases of chloral-habit? If so, please state the amount used, the disease for which the drug was originally administered, the person's temperament, and the present condition of the patient.

All communications will be considered strictly confidential, the reporter's name not being used when a request to that effect is made.

Dr. Kane's address is No. 366 Bleeker street, New York.

Stamps will, in every instance, be returned to correspondents.

JAPANESE QUACKERY.

In *Virchow's Archives*, December 15, 1879, appears a detailed description of a new form of endemic disease peculiar to a portion of Japan, and which is popularly reputed to be of parasitic origin. The disease occurs in a territory subject to annual inundation, and is characterized by a typical febrile course, beginning with a limited sloughing of the skin; it is accompanied with swelling of the lymph glands and an exanthematous eruption. The slough seems to form about any slight accidental wound. The native physicians used to insist that a worm was to be found in the wound, which would move upon exposure to heat, and this they pretended to demonstrate. On the under surface of the plaster they laid upon the sore, they attached a stiff thread or hair, which could be subsequently exhibited when the plaster should be removed. This alleged worm, when brought near a hot coal or a flame, would twist about and so vindicate the theory and skill of the doctor. This device reminds us of the toll worm of the Germans, which according to the common notion, years ago, gave rise to hydrophobia in dogs, and was to be found under the tip of the tongue.

CORRESPONDENCE.

PHILADELPHIA LETTER.

Messrs. Editors:—No inconsiderable part of the activity of the profession in this city finds vent in the proceedings of our various medical societies; and, although we can not boast of as great a number as our New York brethren possess, yet, of those we have, the majority are in good working order, and show signs of vigorous life. A short sketch of the chief characteristics of our societies may not be uninteresting to your readers. And first, venerable for its gravity and age, may be mentioned the College of Physicians, whose library I described in my letter of last July.

The College of Physicians of Philadelphia is composed of physicians of this city, graduates of a respectable medical school, of at least five years' standing. The name of the candidate for membership must be presented with the indorsement of three members of the College, and is read out at three successive meetings before being submitted to the ballot. At the last reading it is customary for a friend of the candidate to offer some remarks in his favor, alluding to his general character and attainments, and mentioning any public position which he may hold, and any contributions to medical knowledge which may have proceeded from his pen. Woe be to the unfortunate candidate whose friends happen to be absent from this meeting. The man whose name is read out in silence is doomed. The noiseless but fatal black-ball speeds its way—three are sufficient—and the luckless aspirant for membership is rejected. The result of this careful selection of members is that an election to the College means something, and that those who have its imprimatur may safely be regarded as honorable and worthy members of the profession. Once within the desired precincts, however, the newly-fledged member finds himself in an atmosphere to which one must become accustomed before he can breathe freely. At first it produces a sensation of asphyxia;

one is choked by the solemn respectability of the hall of meeting, with its luxuriously cushioned chairs, its book-lined walls, and sombre paintings of past worthies. The chief officers are grave and dignified old gentlemen, and even the younger members, who take a more active part in the proceedings, seem precociously and portentously serious, and are evidently training for the official positions they hope in time to fill. Routine governs everything. The minutes are duly read, the librarian reports accessions to the library, the treasurer solemnly presents a bill for a paper of tacks, with the report of the auditing committee thereon duly written and signed. Written communications are stated by the chair to be "now in order." None are made. Oral communications are then called for, but in vain, and an adjournment being moved is carried, and the College of Physicians stands adjourned. Attendance at about three such meetings is usually sufficient to satiate the new member with the experience, and thereafter the semi-monthly notice finds him at first saying to himself that he "ought to go," but it is so hot, or cold, or wet, as the case may be, that he will put it off until next time. Gradually, however, he grows more callous, until the notice is pitched aside lightly as it comes, making no more impression than the pricks of conscience on the hardened reprobate. I used often to think that the attendance at the College meetings comprised only the officers, and those who hoped to be officers. Of some two hundred and twenty members of the College, only about fifteen or twenty are found at any one meeting. The yearly volume of "Transactions," however, contains a dozen or fifteen papers of more than average merit, and occasionally of high value. The fact is, that the meetings are not the strong point of the College of Physicians; its value as an institution lies in other fields. It is the curator of the large and valuable library which I described to you in my last letter, and to its fostering care, this collection owes its completeness. In addition to this, it takes charge of the "Mütter Museum," the foundation of which was laid by the bequest of a large number of pathological specimens, brought together by the late Prof. Mütter, of this city, who also bequeathed funds for the augmentation of the same. This collection now comprises very many valuable specimens in various branches of anatomy and pathology, and notably the very complete series of preparations illustrating the comparative anatomy and pathol-

ogy of the ear, made by Prof. Pollitzer, the distinguished German otologist. Some of these preparations are really the most wonderful one could imagine for delicacy and beauty of preparation. Such, for instance, is the group illustrating the comparative anatomy of the ossicles of hearing, numbering a hundred or more sets of bones from the ears of various animals, from the elephant to the mouse. Among the medical curiosities may be mentioned certain parts of the famous Siamese twins, who were dissected by a committee of the College, on their death a few years ago, together with photographs, casts, etc., illustrating the case of these individuals from every possible point of view. A curious group is the skeleton of a deformed dwarf, three to four feet high, hanging in one of the cases, which holds in its bony hand an infant's skull. A glance at the contracted pelvis tells the story of pregnancy and Cæsarean section. A series of injected placenta forms another feature of the collection, which is also being constantly added to, and will doubtless in time prove a valuable store-house of material for future investigation and lectures. Courses of lectures are delivered from time to time on the same foundation, the "Mütter lectureship," as it is called, being a lectureship on surgical pathology. The latest course was that delivered year before last by the younger Gross, on "tumors of the breast." It will be seen, then, that although the meetings of the College of Physicians lack interest, excepting to a few, yet it is doing a good work for medicine here in Philadelphia, and in no way better than by upholding a high standard of professional character.

Next in point of age among our medical societies is the Pathological, which was established in 1857 by a number of gentlemen, nearly all of whom have since then become prominent, and some distinguished. The constitution, as at first adopted, stated the object of the society to be the "promotion of morbid anatomy," a somewhat questionable aim, perhaps, if strictly interpreted; but nothing has been alleged against the members which would lead to the supposition that their zeal for pathology had outrun their regard for the lives of their fellow creatures. The society is at present very active, and as the improvement in the teachings of our medical schools brings in a larger number of young men well guarded in the principles of pathological science, it may be hoped that each year will see an improvement in the quality of the transactions. In addition

to the presentation of specimens and the reports of general and special committees on morbid growths, etc., general questions are occasionally mooted for discussion, and now and then elaborate papers are read. The membership is about two hundred, and the meetings are well attended and full of interest. Unfortunately our older men, as a rule, take but little active part in the proceedings of the society, which is chiefly carried on by the younger members of the profession. The present president of the Pathological society is the younger Gross.

The Obstetrical Society is one of the features of Philadelphia medicine. Founded not much more than ten years ago, it has been very active, and has been the scene of many hot conflicts between the great guns obstetrical of this city. Here Goodell may be seen to the best advantage, with his impressive figure and earnest eloquent language, putting forth the peculiar views on various subjects with which he is identified; and here those views may be heard combatted or supported by Albert H. Smith, and other authorities, less well known outside of our city, but having a distinguished local reputation. I think the best debates to be heard in any of our societies, are those which take place in the Obstetrical. Listening to these, and looking at the eager listeners, one can more readily believe that there is a persuasion in the living voice which is lost in the printed page. The so-called "minor specialties" are not well represented in our societies. Our eye and ear and throat and skin men either feel the lack of an appreciative audience, or are wanting in clinical opportunities. At least their voices are not often heard, and even discussions on special subjects are sometimes allowed to go by default to those who are quite unfitted to carry them on.

The County Medical Society is the most active and generally useful and influential among the medical community at large. It does not pretend to select its members, but cheerfully admits all who are in good professional standing. Consequently, it is a fair representative of the profession. Its meetings are well attended, numerous papers are read, and discussion is free and general. The *Philadelphia Medical Times*, which is its organ of publication, almost always contains some paper or papers which have been read before it, and from the high practical value and interest of these papers one can form a fair idea of the work done in this society. Here the prominent men of the

profession read their authoritative essays, which are to bring in shoals of consultations; here the pushing men leap astride of the latest medical hobby to ride into temporary notoriety; here the fledgling specialist launches his tiny paper boat and commits himself to the adverse winds of criticism, to the cold sneers of the "practical," and the ill-disguised contempt of the "all-around" men. Here, too, may be seen the practitioner from the remote suburb, whose unadorned and mud-splashed gig stands outside beside the elegant coupé of the brilliant leader whose words he is drinking in, and whose formulæ he is copying in his note book. Without the ponderous respectability of the "College," or the scientific atmosphere of the Pathological, or the brilliant debate of the Obstetrical, the County Medical Society is an institution *sui generis*—an epitome of Philadelphia medicine—and, I do not hesitate to say, one of our most valuable societies.

Of the Academy of Surgery, which has recently been established, not much can be said excepting that it is select as to numbers,—only thirty members being allowed—and that it starts under favorable auspices and includes our very best surgeons.

X.

COMMUNICATION.

Messrs. Editors:—The following are some practical suggestions with reference to the preparation of unguents, with vaseline as a base:

Being slightly soluble in alcohol, and insoluble in water, tinctures and aqueous solutions do not combine with it. It mixes with glycerine, but, on the addition of water, separates.

Such substances as iodide of potassium, chloral hydrate, iodine, or tannin, should be finely triturated and thoroughly mixed with the vaseline. Chloroform ointment is prepared by melting the vaseline in a wide-mouthed bottle, in a water-bath, at 97° Fahr., adding the chloroform, corking quickly, and shaking briskly till cold.

Gynecologists will find that by triturating borate of soda to a fine powder, and mixing with a little glycerine before adding to vaseline, they will have a fine preparation for vaginal examinations, instead of the gritty, "salted butter" preparations which they sometimes obtain from the pharmacist.

P. H. CRONIN, M. D

BOOK REVIEWS AND NOTICES.

A TREATISE ON THE SCIENCE AND PRACTICE OF MIDWIFERY. BY W. S. PLAYFAIR, M. D., F. R. C. P. Third American edition, revised and corrected by the author; with notes and additions by ROBERT P. HARRIS, M. D. With two plates and one hundred and eighty-three illustrations. *Philadelphia: Henry C. Lea, 1880.*

This excellent work needs no introduction to our readers; the profession in this country know Playfair's *Obstetrics*, and fully appreciate the merits of that practical volume, as is made evident by the fact, that scarce thirteen months have elapsed since the appearance of the second edition; the American edition being exhausted before the corresponding English edition.

The author, in his preface, makes the following acknowledgment to the profession on this side of the Atlantic, by stating that he cannot better show his appreciation for the kind reception which his book has received in the United States, than by acceding to the publisher's request, and himself undertaking the issue of a third edition; he further says, that the editor of the second American edition, Dr. Harris, has enriched it with many valuable notes of which he has fully availed himself.

As so short a time has elapsed since the second American edition was issued, but few changes have been made, and we will confine ourselves to the mention of the more important of these without referring to the general features of this well known book.

One very good illustration has been added, the partitioned uterus after Kussmaul; that very questionable story about the Princess of Schnarzenberg, which is occasionally cited to prove the possibility of life of the fetus in utero after the death of the mother, is finally disposed of, we trust never to reappear.

Additional space is devoted to Porro's operation, Cesarean section and Laparo-elytrotomy.

Porro's operation, because successful in the first two cases, has already been performed thirty-two times with fifteen recoveries, and what is remarkable, it has met fair success in the

hospitals of Vienna and Paris, where the Cesarean section has proved fatal for almost a century; only one case is recorded in the United States.

Although Horatio Storer removed the uterus of a woman in labor in a case when pregnancy was complicated with fibrocystic disease, as early as 1869, no one was tempted to follow in his footsteps, as the case proved fatal. Porro's success gave encouragement. The article on Cesarean section is remodelled which was necessitated by the exhaustive researches of Dr. Harris, the leading authority upon that subject; he tells us that the operation is made far more dangerous than it ought to be by the almost criminal delay in operating. In early cases it is an expedient of medium gravity, but is almost hopeless in late ones. Of the 119 American Cesarean sections fifty-four were saved.

A separate chapter has been devoted to Laparo-elytrotomy and the author acknowledges his indebtedness to Dr. Garrigues, of New York, upon whose exhaustive article in the *New York Medical Record*, the discussion of Thomas's new operation is based.

Some additions and some changes have been made in the chapter on Septicæmia, and attention is justly called to the prophylaxis of the disease. The use of anti-septic lotions is advocated, so also syringing out the vagina night and morning, and rigid attention to cleanliness in bedding, napkins, etc.

So much as to the more important of the few changes made in the third edition. But before parting from this valuable work, which we would heartily recommend to the student as well as the practitioner, a word with regard to but one of its Anglicisms, the application of the forceps and the position of the patient for delivery, more especially for forceps delivery. Dr. Harris indeed gives us some valuable pages on forceps delivery, teaching the application of the forceps to the side of the fetal head, with the patient on the back, believing, as most American practitioners do, that the forceps should fit the child's head, and that the most natural and convenient position should be chosen for delivery. The greater part of the chapter is, however, devoted to the application of the forceps in the left lateral position and in the sides of the pelvis, thus serving to confuse the American student.

In conclusion, we would call attention to a passage on page

472, in which Dr. Playfair says: "In certain cases of unusual difficulty the position on the back is of unquestionable utility, but we may, at least, commence the operation in the usual way, and subsequently turn the patient on her back if desirable."

We must say most decidedly that if the position on the back must be resorted to in the more difficult cases, it is the better, and should be taken at once, so that the operation, however difficult it may prove, can be completed without changes, and that the operation should not first be attempted in an unfavorable position for false modesty's sake.

LECTURES ON PRACTICAL SURGERY. BY H. H. TOLAND, M. D., Professor of Surgery in the Medical Department of the University of California. Second edition. Illustrated. *Philadelphia: Lindsay & Blakiston.* 1879. Octavo; pp. 520; cloth.

In perusing this book we have been reminded of the work of the elder Meigs on Diseases of Women, especially in the matter of freedom of style—almost colloquial—thus making a very readable, if not especially scientific work. Professor Toland draws largely from his own experience, illustrating his subjects by numerous cases from private and hospital practice. He goes over pretty much the whole field of surgery; but the descriptions are brief, too much so, often-times, to be clear. In the matter of elegant, well-rounded or even grammatical sentences he disarms criticism by telling us in the preface, that when the students requested him to write a text-book, he replied that he had not time to write a book with the scientific accuracy of some that had been published, but if they were willing, he would talk them a book. His annual course of lectures was thereupon stenographically reported, and the result is before us. As a text-book on surgery, there are many that surpass it, but to those who would know what Dr. Toland's opinion and experience is on a given topic, it will be most valuable and interesting. Very little or no attention is given to titles and subtitles, even the different chapters or lectures are not headed, and thus it reads like a continuous story. The author has enjoyed a large and, judging from his own report, successful experience, of which he gives the reader the benefit, who is likewise made fully aware that the author was a student of Trousseau and Dupuytren, and that he is familiar with the practice and teachings of Lisfranc, Malgaigne, Vidal, Alibert, Bieth, Bérard, etc. German, English and American authorities

with but few exceptions, are not quoted. Thus we observe that credit is given to the genius of Dr. Paul F. Eve for the invention of the ring in the treatment of fractures of the patella, which, by the way, we believe was first given to the profession by Dr. Gibson, of St. Louis.

For a surgeon, the author is very fond of giving medicines; recipes are scattered freely through the work. A good illustration is found on page 325:

“For rheumatic affections produced by cold, I will give you the best combination of medicines that has ever been suggested: Potass. iodidi, ʒiv ; vin. colch. sem., ʒiss ; tinct. aconiti rad., ʒiss ; ext. actæ racemosæ fol., (cohosh), ʒiij ; syr. zingiberis, ʒiss . Misce. Sig. Take one teaspoonful four times in twenty-four hours, with a quarter or half a grain of sulphate of morphia to relieve pain and produce sleep. Professor Flint, Sr. differs from me, but I still hope he will condescend to try the favorite remedy of a California physician, and then publish in his next edition the result of his experience.”

In the treatment of syphilis we are favored with the composition of several ptisanes, one containing fifteen ingredients, another eight, and another five. Of them he says:

“They are not generally used, and may be, in obstinate and difficult cases, of immense advantage, for many are met in California which baffle for many months the skill of the most scientific and experienced.”

The pictorial illustrations are mostly of cases occurring in his own practice and on which he had operated, showing excellent results. The work is far from being complete. Many important facts in the history of surgical affections are omitted, and many valuable suggestions of treatment are not given. To illustrate: Fracture of the lower end of the radius is described, but, for some reason, is not designated, as it should be, Colles's fracture, though Barton's fracture in same locality (an extremely rare accident) is mentioned. For the treatment, a pistol-shaped splint is recommended, to be placed on the back of the arm and hand, no reference being made to the simple and admirable plan of a broad adhesive strip around the wrist, after reduction, as suggested by Prof. Moore, of Rochester, and Dr. Pilcher, of Brooklyn. In fractures of the lower extremity, no mention is made of Prof. Hodgen's most excellent suspension plan, nor to Salter's swing cradle, nor any other suspending apparatus. In dislocation of the hip joint we are told, page 303, that “the res-

toration of the head of the bone to its natural position can be accomplished only by making extension and counter extension." No reference being made to Reid's method, *i. e.*, by manipulation, by which method, under chloroform, we have, unaided, easily succeeded in such reduction.

We are told, page 320 :

"In caries of the spine with curvature great benefit will result from the use of a properly adjusted apparatus, calculated to relieve the spine from the weight of the upper part of the body, and prevent the increase of the deformity. Such machines are now made in this city [San Francisco] quite as well as in other portions of the United States."

A little jealous of the advantages and capabilities of his own city. Evidently reference is had to some one of the steel braces of which there are several, with crutch heads, pads, etc. And nothing is said of the jacket made from plaster of Paris, or other material that may be applied soft and afterwards hardens, thus fitting accurately and affording the very best support. We don't know whether Prof. Toland never heard of the plaster jacket or whether from some personal dislike to its most enthusiastic advocate, Dr. Sayre, he purposely avoids speaking of it. We have a suspicion of this kind, for on page 321, speaking of posterior curvature and the importance of constitutional treatment, he says :

"Specialists rely too much on apparatus. A practitioner of this kind visited this city a few years ago, but I do not think he increased his reputation by his visit. There was a little boy here, two or three years old, who was doing well under judicious treatment. This man applied an apparatus which the poor little fellow could not carry. His health, after the machine was applied, failed daily, until it was removed and the former treatment resumed, and he is now doing well. If there is any character I abominate, it is one of these machine specialists who has not brains enough to become familiar with ever branch of the profession."

Again, page 333, speaking of a case of hip-joint disease :

"I had Sayre's modification of Davis's splint applied; he [the patient] was allowed to take as much exercise as he desired, and was so well pleased when the specialist arrived in San Francisco, that he said to the parents that it was one of the best managed cases that he had seen, and would insure a cure for five dollars. He applied the same instrument so tight
* * * He recommended a weight of ten or fifteen pounds

should be attached to the foot when the boy was in bed. The next day the boy was attacked with inflammation of the hip joint; an abscess formed and I opened it. Since then there has been a constant discharge from the part, and it is scarcely possible that he should survive. Now I am censured by the friends for having consented to the consultation from which resulted the present miserable condition of a strong healthy boy. I did not ask for consultation, and under the circumstances I could not refuse one. But I must say I did not admire the man with whom I consulted, and I predicted the result."

Dr. Toland demeans himself when he uses such language as the above. To designate Dr. Sayre, or any other physician with whom he consults, as "this man" and "the man," is certainly beneath the dignity of a professor, who should be an example to his students of professional dignity.

In the treatment of sprains no reference is made to the use of either plaster of Paris to immobilize the joint, nor of the use of the rubber bandage as suggested by Martin; two most important adjuncts in its treatment.

We might multiply examples of omissions, but space will not allow.

The book, from its incompleteness, cannot be taken as a guide to surgical practice; but, as before remarked, is interesting reading to those who desire to know the opinion and practice of a surgeon of much experience, and especially of Dr. Toland.

A. J. S.

A MANUAL OF THE PRACTICE OF SURGERY. By W. FAIRLIE CLARKE, F. R. C. S., Assistant Surgeon to Charing Cross Hospital. From the last London edition, revised and edited, with additions, by an American surgeon. Illustrated. *New York: Wm. Wood & Co., 1879.*

This is an octavo in cloth, of 316 pages, being one of the twelve volumes comprising Woods' Library of Standard Medical Authors. It, like its predecessors, is designed to be eminently practical, and must, necessarily, be concise, if it would include in so few pages the whole field of surgery. Such has been attempted, and fairly has it been accomplished.

The contents are divided into five parts, consisting of: Surgical Diseases, Injuries, Constitutional Effects of Surgical Diseases and Injuries, Diseases and Injuries of Various Parts, Tissues and Organs, Operations; and, additionally, eight pages devoted to Formulæ and Receipts. The descriptions are succinctly given, ambiguous terms and ideas being eschewed.

The book is adapted to the use of students, and of general practitioners who desire rapidly to review either a single subject or the whole field of surgery. The work of the American editor has enhanced the book, in that it has brought up to the latest date a number of subjects (though not all) familiar to Americans. We would suggest that, if the editor is not ashamed of his name, he should have insisted on its appearance on the title page or elsewhere; or, if the publishers thought the name would not honor their book, they should have employed some one to do the work whose reputation and opinion they might be proud of.

When we intimate that some important points have been omitted, we refer to several, but will illustrate by giving two only, thus: In the treatment of dislocations of the thigh, nothing is said about the reduction by manipulation, which is the American, and, *par excellence*, the best method of procedure; in reference to remedial appliances for hip-joint disease, no mention is made of the long splint, as suggested by Taylor, of New York, or to the Brooklyn method of depending on the weight of the limb for the extension, or even to Thomas' plan, the British, of a posterior splint.

A few typographical errors exist, as on page 212, tenth line from top, for irreducible, read reducible.

A fair, but incomplete index closes the volume; many more references should have been included than are given. For example, no reference is made to carbuncle or felon, and fifty others, which, nevertheless, are treated of in the body of the work. The utility of a book is greatly enhanced by a full index, so this one would be.

Wm. Wood & Co. have done well in including this volume in their most valuable standard library, which is uniformly well printed and bound, and is certainly cheap at the low price of twelve dollars.

A. J. S.

BRAIN-WORK AND OVER-WORK.—By Dr. H. C. Wood, Clinical Professor of Nervous Diseases in the University of Pennsylvania, Member of the National Academy of Science, etc., etc. *Philadelphia: Presley Blakiston. 1880. pp. 126.*

This little volume is the tenth of the series of Health Primers, and well sustains the favorable interest created by the preceding volumes. The name of the author is sufficient guarantee that the work has been prepared with care and painstaking;

and the style of the writing is well adapted to secure and hold the attention of the lay reader and at the same time interest the physician.

After calling attention to the general causes of nervous trouble and the influence of different kinds of work, he takes up the subject of *rest*, which he considers under three aspects, rest in labor, rest in recreation, rest in sleep; and in the final chapter he alludes to the influence of various stimulants upon the nervous system when that is overburdened; and points out some of the more prominent signs of nervous breakdown.

"The really busy man is the one who most needs to read books of the character of the present. To save the life of the man who is always afraid of being overworked, it is hardly worth while to write a Health Primer."

To our busy brothers in the profession we commend the book as one which they will read with interest themselves and which they can safely and wisely place in the hands of their patients.

EYESIGHT, AND HOW TO PRESERVE IT. By GEORGE C. HARLAN, M. D., Philadelphia, Surgeon to the Wills' Eye Hospital, etc. *Philadelphia: Lindsay & Blakiston* (now Presley Blakiston.) 1879.

The object of the author, to place before the reader such elementary knowledge as to enable him to understand the condition under which eyes must do their work, and to make him acquainted with some important points in regard to preserving the healthy state of this valuable organ, has been very well attained in this little book. The educated and cultivated public, to which it is mainly addressed, will be thankful for this valuable present. The different chapters, giving the outlines of "Anatomy of the Eye," "Physiology of Vision," "Optical Defects, etc., etc., are clearly written, and being free from technical terms, will be enjoyed and appreciated by all those who are desirous to gather useful information about the nature and the conditions of this most important organ. R. G.

PHARMACOGRAPHIA. A History of the Principal Drugs of Vegetable Origin, met with in Great Britain, and British India. By FRIEDERICH A. FLUCKIGER, Phil. Dr., Professor in the University of Strassburg, and DANIEL HANBURY, F. R. S., Fellow of the Linnean and Chemical Societies of London. Second edition. *London: Macmillan & Co.* 1879.

Pharmacographia, a writing about drugs, is a work which is alone in the special field which it claims to occupy. Pharmacy and therapeutics are excluded, hence it is dependent upon col-

lateral works on these subjects. Being in a strict sense a "history of drugs," the field of inquiry is limited, and the subjects, in consequence, are discussed in the fullest details.

The scope of the work is comprehended from the following outline, which is observed in describing each individual drug: Botanical Origin, History, Description, Microscopic Structure, Chemical Composition, Uses, Adulterations, and Commerce. In some instances the Method of Collection is referred to. The first edition was published in 1874, and was soon exhausted. It has remained out of print since then, owing to the death of Daniel Hanbury, in 1875. The revision of the present edition was performed by Professor Flückiger, assisted by Thomas Hanbury, F. L. S. The original plan is adhered to; some matter is omitted, but numerous additions increase the volume about one hundred pages.

The appendix contains "Short Biographic and Bibliographic Notes," and is an interesting and valuable addition.

Apart from its value as a practical and scientific work, it is not without interest to the linguist, as the following quotation will exemplify: "The word *Liquiritia*, whence is derived the English name Liquorice (*Lycorys* in the 13th century), is a corruption of *Glycyrrhiza*, as in the transitional medieval form, *Gliquiricia*. The Italian, *Regolizia*, the German *Lacrisse*, or *Lakriz*, the Welsh *Lacris*, and the French *Régliste* (anciently *Requelice*, or *Recolice*), have the same origin." The above does not surprise us, after what is promised in the preface, as the authors, in furtherance of their plan, "have availed themselves of the resources offered by Ancient and Modern History; nor have they hesitated to lay under contribution either the teaching of men eminent in science, or the labors of those who follow the paths of general literature." We commend the book especially to students of *materia medica* and pharmacy, and it would be a valuable addition to every druggist's library.

J. M. G.

FIRST STEPS IN CHEMICAL PRINCIPLES; an Introduction to Modern Chemistry, intended especially for beginners. By HENRY LEFFMANN, M. D. Philadelphia: Edward Stern & Co. 1879. 16mo. 52 pp.

To write a good book which in fifty small pages shall teach the rudiments of chemical knowledge to a beginner in the study, is a task worthy of the powers of a master. In the present instance, it appears to the reviewer that the author has attempted a labor somewhat beyond his ability to do thoroughlywell, and

yet in a field in which a mediocre performance is equivalent to a failure. While there are better books of the same general scope, it would be a wrong to young students to recommend this. *

BOOKS AND PAMPHLETS RECEIVED.

A MANUAL OF PATHOLOGICAL HISTOLOGY: By V. Cornil, Assistant Professor in the Faculty of Medicine of Paris, and L. Ranvier, Professor in the College of France. Translated, with notes and additions, by E. C. Shakspeare, A. M., M. D., Ophthalmic Surgeon and Microscopist to the Philadelphia Hospital, etc., and J. Henry C. Simes, M. D., Demonstrator of Pathological Histology, and Lecturer on Histology in the University of Pennsylvania. With three hundred and sixty illustrations on wood. *Philadelphia: Henry C. Lea.* 1880. Pp. 784. 8vo. (Through the Hugh R. Hildreth Printing Co.)

A MANUAL OF AUSCULTATION AND PERCUSSION, embracing the Physical Diagnosis of Diseases of the Lungs and Heart and of Thoracic Aneurisms. By Austin Flint, M. D., Prof. of Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College. Second edition. Revised. *Philadelphia: Henry C. Lea.* Pp. 240. 12 mo. (Through the Hugh R. Hildreth Printing Co.)

THE THERAPEUTICS OF GYNECOLOGY AND OBSTETRICS. Comprising the Medical, Dietetical and Hygienic Treatment of Diseases of Women, as set forth by distinguished contemporary specialists. Edited by Wm. B. Atkinson, A. M., M. D., Physician to the Department of Obstetrics and Diseases of Women, Howard Hospital; Fellow of the American Academy of Medicine, etc., etc. *Philadelphia: D. G. Brinton, 115 South Seventh street.* 1880. Pp. 365. 8vo.

CLINICAL NOTES UPON THE USE OF THE GALVANO-CAUTERY. By W. A. Byrd, M. D., Quincy, Ill. Reprinted from *The Practitioner*, Jan. 1880.

EYESIGHT, GOOD AND BAD. A Treatise on the Exercise and Preservation of Vision: By Robert Brudenell Carter, F. R. C. S., Ophthalmic Surgeon to St. George's Hospital, etc., etc. With numerous illustrations. *London: Macmillan & Co.* 1880. Pp. 265. 12mo. cloth, \$1.50.

ON THE INTERNAL USE OF WATER FOR THE SICK, AND ON THIRST. A Clinical Lecture at the Pennsylvania Hospital, October 25, 1877: By J. Forsyth Meigs, M. D., one of the attending physicians to the Hospital. *Philadelphia: Lindsay & Blakiston.* 1880. Pp. 54. 16mo. paper.

THIRD REPORT OF THE BOARD OF HEALTH TO THE HONORABLE CITY COUNCIL OF THE CITY OF NASHVILLE, for the two years ending December 31, 1878. *Nashville, Tenn.: Tavit, Eastman & Howell.* 1879. (From J. Berrian Lindley, M. D., Health Officer, with compliments of the Board of Health.)

TRANSACTIONS OF THE TENTH ANNUAL SESSION OF THE MEDICAL SOCIETY OF VIRGINIA, held in Alexandria, October 21st, 22d and 23d, 1879. Part I—commencing volume III. *Richmond: J. W. Fergusson & Son, Printers.* 1879.

MORPHIA HYPODERMICALLY. The Hypodermic Injection of Morphia, its advantages and dangers. (Based on the experience of 360 physicians.) By H. H. Kane, M. D. *New York: Charles L. Berminham & Co., Medical Publishers.* 1880.

STRANGULATED HERNIA WITH FECAL FISTULA, treated with a new and simple enterotome and an anaplastic operation. By W. A. Byrd, M. D., Quincy, Ill. Reprinted from the *Medical and Surgical Reporter* of Oct. 25th, 1879.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF TENNESSEE, at its Forty-sixth Annual Meeting, 1879. *Nashville, Tenn.: The American Book and Job Rooms.*

PHYSIOLOGICAL LABORATORY. Harvard Medical School, Boston. Collected papers. 1873-1879. For private circulation.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL
SOCIETY.

Stated Meeting, Jan. 15th, 1880. Dr. L. Ch. Boisligniere, President, in the Chair.

Dr. S. G. Moses read a paper on postpartum hemorrhage to be discussed at the next regular meeting.

CHOREIC CONVULSIONS IN NEW-BORN CHILD.

Dr. Coles reported the following case: I have a case of a child who has chorea of the muscles of the forearm and hand, and was so affected at the time of birth. I am satisfied that this condition of the hand is in some way related to that class of deformities which we meet with in *talipes varus*. (This child has *talipes varus* in one foot.) When it is asleep its hands are perfectly natural, but if you wake it up and touch the hand, it immediately assumes this position, (the doctor illustrated the position), and its fingers become twisted—evidently a choreic spasm of the fingers. The hands are affected alternately. The child is about three weeks old.

Dr. Ford.—I have at home a recipe of a Dr. Coke, of Mississippi, for trismus nascentium, by which he cures seven out of nine. It is highly scientific and very interesting. I know Dr. Coke to be a highly credible and respectable practitioner. The treatment is absolute quiet, and inunction at first with spirits of turpentine over the chest, abdomen, legs and arms, and afterwards the use of an embrocation, composed of turpentine and laudanum, and also very small but repeated doses of chloral, and a little chloroform under the bed clothes, and then the most assiduous attention, seeing that the child is not disturbed in the least, in fact it is all a system of attention and care.

Dr. Maughs.—I have a very troublesome cases, a pregnant woman, approaching the full period of her pregnancy,

that has caused me considerable uneasiness on account of the threatening symptoms, and the probability of convulsions during labor. The extremities are greatly swollen; the vulva, eyelids and face are edematous; and there is frequent headache, but no albumen in the urine. I have repeatedly purged her with saline cathartics, citrate of magnesia, etc.; unfortunately she cannot bear iron. Under this treatment the swelling has diminished. The headaches are relieved by foot baths, etc.; but the other symptoms persist. Although there is now no albumen in the urine, there certainly will be if she has a convulsion. She had a child about two years ago, and was very much swollen and edematous during her pregnancy. There is no disease of the heart. The pulse is 80 and compressible. All the symptoms are present that would exist in a most aggravated type of albuminuria—except the albumen. The probabilities are very strong that she will have puerperal convulsions.

I have seen many cases in which there was no albumen in the urine, accompanied by convulsions. Five minutes after this woman has convulsions, the urine will be semi-solid.

Dr. Engelmann.—Do not all the symptoms point to some affection of the kidney?

Dr. Ford.—I should think that they do. Mahomet says that Bright's disease is not necessarily accompanied by albumen in the urine, but by the presence of casts.

Dr. Maughs.—In this case the urine is not mahogany colored, contains no albumen nor casts, and is normal in quantity and quality.

Dr. Ford.—But the absence of albumen gives no assurance whatever of safety; it does not lighten the prognosis at all, but rather aggravates it in my opinion.

Dr. Barrett.—I had considerable experience in the class of cases to which Dr. Maughs refers, in the East where albuminuria is much more frequent than it is here. It was a rule always to examine carefully the urine of every woman who came into the hospital for confinement, whether any trouble was suspected or not. But I have never met with exactly such a case as Dr. Maughs describes, with edema of the face and vulva, headache, etc., without finding albumen in the urine, and generally albumen and casts. If I had a case of that kind, and failed to find casts or albumen, I should not feel so apprehensive about it.

Dr. Prewitt said the absence of albumen in the urine would relieve his apprehensions as to the probability of the occurrence of convulsions. He could not concur with *Dr. Ford* as to the frequency of the absence of albumen in Bright's disease. There is but one form of Bright's disease—the small granular contracted kidney—in which albumen may at times be absent from the urine. In all other forms we have it without exception, and in quantity proportioned to the amount of congestion of the kidney. Chronic granular, contracted kidney, is not the result of pregnancy, and the condition of kidney brought about by pregnancy, and leading to or favoring the production of convulsions, would always, in his opinion, be manifested by the presence of albumen in the urine. The case reported by *Dr. Maughs* is peculiar. It is by no means possible that chronic granular, contracted kidney, has been produced by the pregnancy; and any condition of the kidney due to this cause, and giving rise to general anasarca, puffiness of face, dimness of vision, etc., without the presence of albuminaria, would be extraordinary.

Dr. Maughs.—What would you do?

Dr. Prewitt.—With the marked symptoms presented in this case, if the pulse justified it, I would certainly bleed her. The anemia in these cases is only relative, like those that follow scarlet fever. *Dr. Bramwell*, of Perth Infirmary, insists upon the advisability of blood-letting in those cases which follow scarlet fever, and I think it is one of the best safeguards which we have in these cases as well.

Dr. Engelmann.—I have never seen a case similar to that described by *Dr. Maughs*. I think, as the patient is so near her term, bleeding would be well; but I should certainly follow it up with large doses of tannin, as much as ten grains three or four times a day, combined with small doses of digitalis. If there is an affection of the kidneys, the tannin, I think, would certainly be advisable under the circumstances.

Dr. Ford.—I should expect to find, in that case, some grave lesion of the kidneys, closely simulating Bright's disease. *Mahomet* is very explicit in his statements, and undertakes to change our views on the entire subject of Bright's disease. He asserts that true Bright's disease is characteristically not associated with albumen in the urine, but with casts. I have seen several cases in which such was the case—one was the case of

Dr. Pallen, who died of Bright's disease, and never had albumen in the urine. The casts are granular, and even hyaline. One point which Dr. Mahomet makes, is that a strong pulse is a characteristic of Bright's disease. I had a case recently in which I predicted apoplexy. I never felt such a pulse in my life before; so corded, it could scarcely be compressed. The patient died of apoplexy after some three or four months. The view Mahomet takes is, that the arterial changes are primary, and that other changes are local and secondary. We must use evacnants, diaphoretics, purgatives, jaborandi, etc.

Dr. Prewitt.—What is the age of the patient?

Dr. Maughs.—Twenty-six, and she is pregnant with her second child. In her first pregnancy she was similarly affected; her mother was edematous in her pregnancies.

Dr. Prewitt.—If Mahomet limits Bright's disease to the chronic contracted kidney, he is opposed to all of the other authorities on the subject. Of course, cases do occur not infrequently without albumen in the urine, but such cases are of the chronic form, running over a period of years, and rarely occurring in patients under forty years of age. The youngest patient I ever saw with such a condition was a woman of 32 years of age, but that is very young to have a granular, contracted kidney; and all authorities state that this slow, chronic condition rarely produces any marked symptoms until in an advanced stage. While there are times at which you would not find any albumen, I suspect that there is scarcely a case in which you will not, at some time, find albumen in the urine, if you examine sufficiently often. In the case of Dr. Pallen, to which Dr. Ford alludes, I was told by his physician that he found albumen in the urine at times. There is in these cases, as Dr. Ford says, a hard, tense pulse, contra-indicating digitalis.

Dr. Barrett.—I think the probability is that this woman would pass without convulsions. I have watched cases of this kind with the greatest care, and some of them have gone through without the least convulsion. I have seen the most threatening cases go through successfully by the use of carthartics and hot air baths. I do not know anything about the use of jaborandi from my own experience.

Dr. Boisliniere.—As regards blood-letting in these cases, it must be remembered that in pregnant women, the blood is very poor. It has been proved that the presence of a great deal of

water in the blood favors the production of albuminuria. I recollect a case in which there were headache, occipital pain and vertigo, in a pale, anemic woman; she suffered from disturbed vision, almost total loss of sight; she was swollen everywhere—the labia, feet, face. There was no heart disease, and no albumen in the urine. I bled her on two occasions; took about twenty or thirty ounces of blood from her arm, and all these symptoms disappeared as if by magic. But it was water that I relieved her from more than blood. The same thing happened to her in three or four pregnancies. I would not, therefore, if I failed by Dr. Maughs's method, hesitate to bleed the woman. In doing so you do not deprive the woman of much blood, she loses water, and this reduces the pressure. I would then give her jaborandi. The remedy suggested by Dr. Moses, calomel and soda, is very good.

Dr. S. G. Moses.—I saw last Sunday week, a lady who is now past sixty years of age. I attended her in four labors. In her first labor she had none of these symptoms. But in subsequent pregnancies she became edematous, her eyes swelled up, her hands became so puffed that she could not put on a glove, and she could not wear any thing but a loose gown. It was the fashion to bleed in those days, and I bled her several times during her pregnancies, taking six, eight, ten, or sometimes more ounces of blood, until all headache and loss of vision disappeared. She is sixty years old now, has eight or nine children, and is as fine a specimen of an old lady as you will find any where. I think Dr. Maughs would do well to bleed this patient.

HODGE PESSARIES.

Dr. E. C. Gehring.—Permit me to present some specimens of new instruments with an old and familiar appearance. They comprise, as you see, a number of pessaries, which are sold under the name or names of the "Hodge pessary," by surgical instrument makers and dealers in rubber goods. I should not have noticed this article were it not for its having completely usurped the place of what has been known under that name for years.

The Hodge pessary is an ingeniously modified ring. Its value and universal renown are derived from these peculiar and well-studied curves. The substance of which it consists (solid

vulcanized rubber) largely contributes to its value, since it admits of being moulded into any desired shape. Remove these curves and change the material of this pessary and nothing is left deserving the name. This is exactly what has been done with these new instruments. It can be perceived at a glance that the outlines of these specimens vary considerable from the old Hodge pessary, and that no two of these instruments are exactly alike.

They are easily distinguished from the real article by their brownish color instead of the jet black of the latter. The bars are often not cylindrical, but more or less flat in places; consequently, may easily cut into the tissues against which they rest. They are also lighter than the original instrument; most of them float on water, in consequence of their being hollow. This last quality is a theoretical advantage. What it effects practically will soon be shown. The difference in weight between these and the true Hodge pessaries is from twenty to forty grains, or from one-eight to one-fourth the entire weight. In consequence of the defective curves, these new instruments can but rarely take the place of the original pessary without preliminary modification; while the different material (hollow instead of solid rubber) makes them almost completely unfit for such modification.

Considerable more time and heat is required to soften the hollow pessary sufficiently to bend it. The heat, instead of being localized, as in the solid substance, is distributed through the air or vacancy in the pessary and carried to distant parts, where it produces softening sufficient at times to warp the instrument contrary to the operator's wishes. It loses heat as rapidly as it is slow in gaining it, so that it hardens again before the desired changes can be made. If with perseverance a somewhat sharp bend is made, the bars become flat (like a sharp bend in a soft rubber tube) and broader at the angles than elsewhere, wherefrom pretty sharp points will result at the sides of the bars. The difference in weight, as stated before, is more an apparent than a real advantage, since with these instruments weights, many times that of the instrument, have to be and also can be supported without the pressure or the presence of the pessary being perceived by the patient. It is not the weight, but the bad adaptation and shape of pessaries that cause the pain and discomfort to the wearer.

This may seem to be an unimportant matter; but see what an effect it must produce on the practitioner in the country, who reads in the classical works the art and necessity of modifying pessaries for special cases. This substitute being supplied to him in place of the real article, a few attempts will suffice to disgust him with the teaching of our esteemed writers, as well as with mechanical gynecology, this, to the conscientious gynecologist, now indispensable part of our specialty.

The society then adopted the following resolution:

Resolved, That the St. Louis Obstetrical and Gynecological Society does not recognize this class of goods as a fair representative of the Hodge Pessary, and that the venders of pessaries be hereby requested, in the interest of the public and the profession, to return to the old and tried pessary of that name.



MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, October 26, 1879. Dr. Gregory in the Chair.

TRACHEOTOMY IN CROUP AND DIPHTHERIA.

Dr. Gregory.—I would like to ask whether in diphtheria patients die from difficulty of breathing, or whether they do not breathe pretty well shortly before they die. I recollect a case which I saw with Dr. Glasgow some years ago, at Barnum's Hotel, where you (addressing Dr. Glasgow) thought that a tracheotomy should be made, but when I got there, you agreed that the child was not dying from suffocation. It had been breathing very badly, but before it died breathed much better for several hours than when you sent for me. I have seen several cases where the great distress in breathing seemed to pass away hours before the death of the child, and where, if you had been called upon to open the trachea, you would have said, Well, I do not see any indication to open it. It becomes a very pertinent question whether these children do not, some hours before their

death, breathe very well. The cases that recover, after tracheotomy, are more numerous than those where tracheotomy is suggested and omitted. I recollect, sometime ago, being sent for by Dr. Moses to perform tracheotomy. When I got there, they all agreed that the child's breathing was better, and the operation was unnecessary. Students say, "I am going to get a tracheotomy tube. The next time I am going to operate. I would have operated last time, but I had no tube." I ask them, how the case turned out, and they answer, it got well! I might cite a list of such cases; so that I am forced to conclude that the patients who get well after tracheotomy would have got well anyhow. It is a question with me whether it saves life. Last winter, sometime in February, I was called by Dr. Webb to see a child that had tracheal diphtheria. I told him I did not know what to do more than he was doing, unless to open the trachea. A few days after, I was riding out to my house, when a messenger came to me saying the child was in great danger. When I got there, I found the house in the greatest consternation, because the child seemed to be dying or dead; had actually stopped breathing. It would start up and breathe a little occasionally and then stop, as if it could not breathe at all. I just opened the trachea, without any body to assist me, put in a tube, and the child got well. That child I thought would certainly die; and that was an occasion when tracheotomy seemed to recall the patient to life; but it is the only case in which I am perfectly certain that tracheotomy cured.

Dr. Todd.—Where did you cut through?

Dr. Gregory.—At the cricoid. I always take the cricoid as a starting point. I expose it and aim to open the trachea at the first ring below it. But if suffocation were very imminent, I would not be afraid to cut the cricoid itself and include the thyro-hyoid membrane, and I do that in very young children. It is not at all dangerous, the cartilage in them being so yielding. I think you can open the trachea at the cricoid, or just below it, as well as anywhere else.

Dr. Todd.—Have you ever made a point of operating below the thyroid gland in those cases.

Dr. Gregory.—No, I have not.

Dr. —.—I was present where you operated in one case, in which there was a recovery. Dr. —'s child. The doctor said he tried two weeks afterwards to withdraw the tube, and

he had to put it back. I am inclined to think that recovery in cases where tracheotomy is performed, is very rare indeed. I have so frequently performed that operation without success, that I have become disgusted with it. The patients do not die immediately after the operation, but two or three days, or even a week afterward. It is the most discouraging thing in surgery. There can be no question about its being the impression here, that some who die, would have got well if the operation had not been performed; and there is considerable doubt whether the operation is as harmless a thing as is generally assumed.

Dr. Hardaway.—Is it not a fact that in most cases where the operation is performed to extract foreign bodies, there is recovery?

Dr. Gregory.—Yes. But operations for foreign bodies are performed in healthy people. And it is a fact well known, that surgical operations in febrile conditions of the system are unlikely to prove successful, nobody ever selects that condition of the system for a surgical operation. Usually, we wait until the febrile condition subsides.

Dr. Glasgow.—The question in these cases is whether they die from obstruction of the larynx, or from the poisoning of the system.

Dr. Gregory.—I suppose they die from the poisoning. It was a very popular notion many years ago, and was taught by no less an one than Dr. John Symonds, that what he claims as the venous condition of the system is unfriendly to the inflammatory process. It is the doctrine of his book that venosity is an enemy to inflammation. But it has occurred to me that this venous condition, so far from being unfriendly to this local disease for which tracheotomy is performed, might, perhaps, be advantageous. And hence, I put the question, sometime ago, whether these patients who seem to die, succumb from lack of breath, or whether this does not pass away several hours before death. I think that if the subject were studied it would be found that very few people succumb in this extreme condition for which tracheotomy is performed.

Dr. Todd.—I think what you say about the danger of operating in that febrile condition is something that we ought to bear in mind. I recollect hearing it taught at the children's clinic in Vienna, that the proper time for operating is when the

lividity of the fauces is first noticed. Now, of course, with such a rule as that, we would often operate when the patient would have gotten well without the operation.

Dr. Gregory.—Observation has undoubtedly proven that the febrile condition of the system is extremely unfavorable to surgical operation; but in these cases it sometimes, *must* be done. Still it should not be performed unless it is unequivocally indicated, and I can never agree with that class of practitioners who say that it must never be put off, that it must be performed early. Of course, if it is performed early, the patient may get well in spite of your operation. If you perform it not very late, in extreme cases, where suffocation is imminent, you act very properly, because nothing else can be hoped for after that.

Dr. Glasgow.—Dr. Todd's suggestion, that the operation ought to be performed as soon as venosity shows itself, would I think, come to grief in a certain class of cases, those where there is an enlargement of the bronchial glands. We had a little girl at the hospital a few days ago, in whom there was great venosity of the blood; the mucous membrane was purple and it was all due to an enlarged bronchial gland pressing upon the vessels. Why should that not occur in diphtheria?

Dr. Gregory.—There is no reason at all why it should not.

LARYNGEAL PAPILLOMATA.

(For report of case by *Dr. Glasgow*, see January *COURIER*, p. 45.)

DISCUSSION.

Dr. Gregory.—These so called papillomata are often nothing else than redundant granulation tissue. I have read, but lately, where some very eminent dermatologist taught that sarcoma is nothing else but a sort of redundant granulation. You cannot make anything of it anatomically but a sort of overgrowth of the granulation structure. At the same time these growths may have a disposition wholly apart from the simple structure to which they are similar anatomically. They have a peculiar disposition, which the structures that they anatomically resemble do not possess at all. For instance, we have here a wart, an epithelial growth on the surface, of a prominence, but if we make a section of this prominence, find that the epithelial structure is in the substance of it, we say it is a malignant wart. The one

has a kind disposition, and the other a vicious one. When you cut out one you calculate that it will not return, the other you calculate, if it does not return in the same place, will occur in some other part of the body.

Dr. Glasgow.—Some papillomata are benign until they are disturbed.

Dr. Gregory.—Yes; disturb them, and they come back in a bad shape, just like a wound which is disturbed, which is very benign to-day, but becomes vicious in a few days, when annoyed by some injurious dressing.

Dr. Todd.—I think what you say in regard to the origin of some of those papillomata is probably correct. Not unfrequently in the course of a chronic inflammation of the ear, you will see these granulations spring up, and if left alone, they will become papillomatous polypi. In the larynx a great many of these papillomata spring up on the edges of the cords, and we can see that in the beginning of catarrh, when they are brought together violently in the effort of speaking, an erosion is caused, and a granulation springs up from the raw edge. I find that these papillomata frequently take their origin from clots. Several that I have treated are distinctly traceable to that cause. I recollect one in particular, the case of a clergyman, who dated his troubles back into Easter time, when he had to preach very frequently, and became very hoarse. He had a papilloma on one of the vocal cords. Very often patients give a simple catarrhal affection as the origin of these troubles.

Dr. Gregory.—Whenever a tumor has an arrangement in lobules or laminae that closely resembles any of the natural textures, it is not malignant. These papillomata have a pretty distinct arrangement of tissue with the epithelial covering on the surface.

I think that Dr. Glasgow's case is a triumph, and it seems to me that one who is successful in removing such growths, as he has done, deserves more credit than for a hundred cutting operations, and there is more skill in it. It seems to me that it is the ultimate destiny of surgery, to reach its purposes with the least possible loss of tissue, and of blood, and the least possible display of cold steel, that makes it so attractive to young men, and gives it a sort of prestige in the vulgar mind.

Stated Meeting, Nov. 10, 1879. Dr. Maughs in the chair.

TUMORS OF THE HEAD.

Dr. Prewitt.—The only tumors of the head that are of especial interest, are those which occur most frequently in children—congenital tumors. The congenital sebaceous cyst and the meningocele are especially interesting in a diagnostic point of view, though of little interest otherwise, the conditions rarely justifying removal. They usually occur about the normal openings in the skull—are soft, sometimes can be partly pressed back within the skull, and in those cases produce brain symptoms which would, of course, be a diagnostic point; but there are cases in which obliteration of the neck of the sack occurs. In such cases it is very difficult to make a diagnosis. Even in those cases where they have a comparatively small neck, it is found that there is almost always a certain amount of internal hydrocephalus. Some of these tumors have brain substance in them. Any attempt at an operation would be immediately fatal, of course, and in that case the diagnosis is sometimes assisted by the pulsations of the brain substance in the tumor, but not always, because oftentimes there is a layer of fluid over that, that would hide the pulsation of the brain. The most frequent site, I think, is through the occipital bone behind the foramen magnum, though the tumors have appeared near the sides, in the region of the fontanelles. The sebaceous tumor is very interesting, from the fact that it oftentimes penetrates the skull and the dura mater. Tumors about the head or orbit require a great deal of caution in diagnosis, as to the possibility of their penetrating through the skull, and coming in contact with the membranes of the brain. Attempts have been made to remove them, and death followed, for the reason that the dura mater was thus exposed, and meningitis developed. Sometimes, by passing the finger entirely around the margin of the tumor, the margin of the bone can be determined, though not always. Cases have been reported in which every effort was made to determine whether the tumor perforated the skull, and it was found, upon operation, that only a small portion penetrated the skull.

Dr. Holland.—What is the prognosis of those tumors appearing at the top of the head, at the posterior portion; those you see during the first month or six weeks? I have seen, recently, two cases of tumor occurring about the region of the posterior fontanelle. One of them developed about the time of labor, and the other a week or so afterwards. The last one mentioned continued to increase for some time, and assumed a perfect oval shape, like an egg. The neck was not much contracted. After a month or two it disappeared. It was not noticed until about a week after birth. It was soft and fluctuating, and I began to be afraid that, from some cause or other, it would break where the skin was discolored.

Dr. Hardaway.—If you will allow me to compare small things with great, I can possibly widen the field of discussion a little by reporting a case recently sent me, of a tumor in a young lady about twenty years of age. It was a case of milium. Instead of being few in number, and just under the eyes, as is customary, this case presented rather a unique appearance, as there were possibly fifty or sixty, occupying almost every sebaceous gland in the face. Of course, they were nothing more nor less than small sebaceous tumors. The patient presented an appearance which, in an epidemic of small pox, would give rise to a good deal of doubt as to whether that was not the disease. I am certain that, if this patient had had fever during an epidemic of small-pox, the diagnosis would have been difficult. I think the case interesting in that regard, and also in regard to the treatment. The usual treatment of milium is puncture with a needle; but, as we all know, the papules are then very likely to return. In this case I purpose using the electrolytic needle, inserting it into the follicle; and I think, by that means, the likelihood of return will be much less. I purpose using a very small cambric needle, and I am certain, when the milia are limited in number to a dozen or more, there can be no doubt of the success of the treatment.

Dr. Maughs.—The case which Dr. Holland mentioned was a succedaneum. They almost always appear upon a portion of the parietal bone, a part which is opposite to the circle of the os uteri, so that, being free from pressure, that part is infiltrated with serum. Instead of being simple serum, there may be extravasation of blood—not under the pericranium, but under the muscles, and in the tissues of the skin. It is generally an edema

which passes off in a few days, but it may suppurate. Then there are those tumors, the syphilomata, which are of great interest. I remember a very interesting case of a young man, who complained of a violent headache, which was relieved only by large doses of morphine. I diagnosed syphiloma. Dr. Prewitt saw him also, and determined that it was syphilis. The patient was put under antisyphilitic treatment entirely, and greatly relieved, cured, as much as these tumors can be—they are the only tumors of the brain that can be cured—all other tumors of the brain have a fatal termination. It is always well to put the patient under an antisyphilitic treatment, with the hope that it may be syphiloma; and if it is not, there is no harm done. Unfortunately, diseases of the brain are still obscure. While we are able by percussion, auscultation, and palpitation, to discover unmistakably during life almost the exact pathological changes that have occurred in the chest and abdomen, the brain, “the dome of thought,” remains hidden and secret to the present day. I have seen two cases of fatal tumors of the brain that I remember well. A lady from the upper part of this state was sent to me for supposed hysteroid epilepsy. Upon examination I could not find any condition of the uterus which indicated that it was the cause of the patient’s condition, and I thought it more than probable that it was some disease of the brain. Dr. Bauduy saw the patient with me, and he diagnosed tumor of the brain. The woman died shortly afterwards.

A man came up from the southeastern portion of the state, and brought his wife, who was suffering with epileptiform seizures, to see me. I found no condition of the uterus which would explain the symptoms. I introduced a ring pessary, hoping that it might mitigate the trouble. The patient passed that night well, and on the ensuing night had an epileptiform convulsion. On seeing her I prescribed for the hysterical condition, but suspected some brain trouble, and remarked to her husband that if these attacks continued, he had better send her to the hospital, and if this pain went on she would certainly become insane. She returned home, and sometime afterwards died with tumor of the brain. This was a counterpart of the case I had seen with Dr. Bauduy. These were not syphilomata.

Another class of brain tumors is tubercular formation on the meninges. I attended a very distinguished physician of this city who had very obscure brain symptoms, but all of them in-

dicated compression of the brain by some tumor or thickening of the pia mater. The physician himself regretted that he had never had syphilis in his life, because it would afford a hope, that otherwise was cut off from him. He was obliged to go to Hot Springs, and remained there some six or eight weeks. As a result of his drinking large quantities of hot water, (for that solvent power of water is the only virtue of "the springs"), the tumor was greatly reduced, and the doctor has been a great deal better. The head symptoms referable to the tumor have entirely disappeared. The great advantage patients derive from the hot springs of Arkansas is owing to the immense amount of water they drink—an amount it would be utterly impossible to get them to drink at home; and of all the things in the world, water is the most universal solvent. If it is possible for tumors to be dissolved, it is by drinking an immense quantity of water. I have no doubt that many of our patients would be cured, if instead of giving them half a grain of iodide of potash in a teaspoonful of water, we gave it in a quarter of a barrel of water.

Dr. Holland.—A case came under my care some years ago of a man named Barth, who came to Dr. Gebser for some eye trouble, and who was paralyzed in one hand. It was a clear case of a stroke of apoplexy. The stroke, and the coming on of paralysis, indicated true apoplexy; but the history of the case and the very great pain he experienced all the while in his head, and his general history, pointed to a gummy tumor. Dr. Gebser will remember the case.

Dr. Gebser.—Dr. Frazier and Dr. ——— made the post mortem examination in the case. It was a case of thickening of the basilar arteries and softening of the brain, syphilitic. There was one symptom which is almost always present in these affections of the brain, neuritis optica. There are only a few cases on record in which neuritis did not exist. About three years ago I saw the case of a woman who had been complaining of dimness of vision, and slight pain was occasionally experienced. I saw the woman for the first time in Dr. Pollak's office in consultation. She afterwards came to the clinic. Neuritis optica existed in the left eye, which slightly protruded. The vision was very much impaired already. I told her there was nothing to be done at that time, and I only wanted to watch her, which I did for about two years and a half. Gradually the eye pro-

truded more and more, and one year and a half after the first time I saw her, the tumor could be detected by observation. It grew so slowly, and there was so little continuous pain, that I advised the woman not to have any thing done to it.

Last February she complained so much of the pain and of the deformity, which was so great as to attract universal attention, that I removed the tumor, which I expected at first to find around the optic nerve. It took rather a long time to remove the tumor, and there was a good deal of blood lost, so that one or two days afterwards I feared the case would have a fatal ending. She recovered gradually, however, and about ten or twelve days afterwards left the hospital. It was healed entirely, and the last time I saw her (it was two or three months ago) there was no sign of a relapse. Nevertheless I told her it would not be a surprise to me if a relapse should occur in the course of time. Another case developed in exactly the same way, and I removed the eye and the whole tumor exactly as in the case of this woman, and the microscopical examination shows that it is a round celled sarcoma; in the case of the woman there were both round and spindle cells. These tumors, by ophthalmoscopic examination, can generally be discovered.

Dr. Hardaway.—Do I understand you to say that in all cases of tumors there is neuritis?

Dr. Gebser.—Yes; about ninety per cent.

Dr. Prewitt.—Is this true of gummy tumors?

Dr. Gebser.—Not so generally as in sarcomatous tumors. In the case to which Dr. Holland refers, there was no optic neuritis at all.

Dr. Prewitt.—What was the state of vision in those two cases you speak of?

Dr. Gebser.—Entirely destroyed.

STATE MEDICINE.

Dr. Oscar C. DeWolf, Commissioner of Health, of Chicago, read before the Chicago Medical Society, last October, a very interesting paper upon "The Relation of the State to the Individual, in matters pertaining to Sanitary Administration." The following extracts are from the *Chicago Medical Gazette*, Jan. 5, 1880:

Filth, disease, crime, are well called the three furies of our age and of our civilization; and sanitary science, dealing with the individual man more than with the destiny of the race, seeks to relieve him from the immediate influence of the one, and thus to hinder the tendency toward the other.

Experience and common sense alike, declare that it is as much the province of government to protect its citizens, in so far as possible, from disease and death, as it is to guard them against the depredations of the lawless and criminal class. The fundamental object of all government, indeed, is to protect life and property; and it is just as essential that the citizens of large cities be protected by government against the manifold and mortal dangers of ill-ventilated tenement-house vaults, as that they should be protected against incendiaries, thieves or robbers. The poor have no houses to be protected by the fire department, and no property to be protected by a police department. The only property possessed by the great mass of the poor, who occupy tenement houses, is their health and ability to work, and, by their daily toil, to earn their bread. Is it not the duty of their government, (for it is the people's government after all), to protect in every proper way, that health and capacity to labor? Nor should it be forgotten that such protection operates as the protection of the rich as well, for the pestilence that begins in the hut, does not stop at the threshold of wealth.

It is popularly supposed that the excessive mortality in some great cities is an inevitable evil, resulting from density of population. This is an error, for the concentration of preventive

resources is amply able to overcome such causes of insalubrity. This is a fact fully demonstrated in London, where the death-rate has steadily diminished, and the chances of human life steadily increased for the past twenty years. And this has been wholly the result of systematic sanitary improvements in domiciles, in water supply, in drainage, and in the sanitary police of that metropolis. That death rate and sickness rate *are* increased by density of population will hold true, except where special and systematic sanitary care increases and keeps pace with the population growth; and if this be true, can there be any doubt of the duty of the state, to organize by statute laws, those agencies and methods which symbolize a proper concern for the life and social welfare of the citizen, and can there be any doubt of the duty imposed by good citizenship to acquiesce in and submit to such legal restraints of personal freedom in business enterprise or surroundings of domicile, as shall best conserve the public comfort and well-being?

Society demands, as of old, protection to life, property and social order; but she is emphasizing louder and louder every day another demand, namely: "the inalienable right of every human being to be supplied with uncontaminated air, water, food, soil and personal surroundings; and the duty of the state to allow no trespass on this right from negligence, ignorance or greed of gain;" and it demands that law shall recognize this progress also, and provide for it; and that "as powder and other explosives are by legal statutes stored away and guarded, so a small-pox pustule, potent with greater mischief than a magazine of dynamite, shall be for greater reasons stored away and guarded." The officer charged with the sanitary interests of a great city, under the ordinary conditions of civilized life, who permits small-pox to become epidemic in his neighborhood, has supplied the best reason in the world for his immediate displacement. If the local law does not afford an adequate basis for his personal protection and aid in his work, and public sentiment will not sustain him in taking possession of the person and effects of those infected with small-pox, he should resign, placing the responsibility where it belongs; for no city *can* be protected from this loathsome pestilence, if officers of health must rest under the fatal disadvantage where any man claims the right to have small-pox in his own domicile and at his neighbor's door, or to refuse to receive for himself or his family the protecting influence of vaccination.

SYPHILITIC HYPOCHONDRIASIS.

Dowse, in his work upon nervous syphilis, has gone so far as to make the following statement: "I believe that most of the ailments with muscular and trophic disturbances, as megrim and other conditions, which are, in many cases, vaguely termed hysteria, merely indicate an unstable condition of the sympathetic nervous system in persons who are essentially the offspring of syphilitized progenitors." This assertion, which, perhaps, is just the least bit too sweeping, is, however, suggestive of how extensively syphilis may enter into the production of certain vague, imperfectly-understood neuroses, which so often try the patience of practitioners of medicine.

As a notable instance of this connection, I may speak of a form of hypochondriasis, observed in male subjects, especially in those persons who are well developed, robust and apparently in good general health—so far as external appearances are concerned. Cases such as this, are of the most discouraging kind, and rarely remain with one medical man for any length of time, but go the rounds until they finally fall into the hands of quacks. In such patients, the history of syphilis is, by no means, invariably clear or easily made out, and, occasionally, it is necessary to go back ten or fifteen years to find that there have been initial symptoms. In some cases the patient's position in society, and his circumstances, may be such as to often throw the medical man off his guard in hunting out the cause. For example, I may allude to the case of a well known clergyman, recently under my professional care, who gave the history of a train of symptoms which were decidedly incongruous and eccentric. He was supposed to be suffering from the effects of overwork, though in no way did he show any indications of prostration or enfeeblement. I ascertained, with much difficulty, that over twenty years before, while at college, he had contracted a chancre, followed by secondary symptoms, so slight, however, as to make but little impression upon his mind. He rapidly regained health, under specific treatment alone, his subjective symptoms disappearing rapidly.

As Dowse suggests there is, in some cases, a much more remote cause, and, doubtless, hereditary syphilis may account for the development of a more striking collection of disorderly symptoms. In all cases of hypochondriasis, or male hysteria, it, therefore, befits the medical man to search carefully for traces of syphilitic disease.

The indications are especially strong when the secondary symptoms have been unusually light. When an apparently strong man comes to us with a history of fugacious aches and pains, inconstant spasms and disordered subjective sensations—notable among which is subjective cold—we should not immediately make light of his troubles, and even dismiss him for change of air and scene, but, empirically, if our history of cause is not clear, place him upon proper anti-syphilitic remedies.

I may illustrate what I mean by the following case :

Mr. L———, an actor, twenty-three years old, presenting every appearance of good general health. Six years before had a primary sore, followed in a few weeks by secondary symptoms, sore throat, roseola, very slight alopecia, etc. Has since had osteocopic pains, iritis, and eruptions, but there has been no headache, however. The chest presents several copper stains, and there are cicatricial depressions at various parts of the body. Eighteen months ago he became alarmed about himself, not because there was anything positively the matter with him, but because he developed a vague dread that he was about to lose his mind. He disliked to be left alone, and said that he had had a variety of subjective feelings of an irregular and unsubstantial character. Among these were præcordial sinkings, dysæsthsia in the arms, legs and trunk. A few months after the beginning of the ailments he had trembling, which was pronounced by a well known neurologist to be due to "Sclerosis;" but in a week or two after leaving Chicago this symptom disappeared, and has never returned. Two weeks before I saw him, he developed a peculiar form of inspiratory spasm. The features of the paroxysms, which were frequently repeated, were the following: The head was violently thrown back, the nostrils were pinched and closed, the mouth was opened, and short, labored inspirational efforts were made; the chest walls were fixed, the abdominal muscles were convulsively moved, and there was irregular contraction of the

diaphragm. His face became livid and anxious. These attacks would last from ten to fifteen seconds, and afterwards there were occasional short seizures, characterized by one or two forcible inspirations and a choreic twitching of the facial muscles. These forms of attack occurred, especially, when he was excited, or under observation.

When upon the stage he, as a rule, managed to control himself. Anxious to witness his behavior under these circumstances, I accepted his invitation to go to the theater where he was engaged. Before seeing me he showed no indication of trouble, but as soon as I took my seat, and when he noticed me, his paroxysms occurred in a way to seriously interfere with his acting. I left my seat, as if to go out of the theater, and when I did so, he became perfectly quiet; but on another occasion the attacks were repeated as before. This trouble was then entirely hysterical, as it always occurred when his mind was especially filled with his complaint, or he knew he was under observation.

In a few weeks these attacks subsided, and were supplanted by a new series of symptoms. After trying moral treatment without avail, he was placed under specific treatment at my suggestion; and a month or so ago, I found that he was perfectly well and happy, and laughed heartily at his former troubles.

In other cases I have witnessed equally striking results of specific medication in such forms of nervous trouble, and in patients who had resisted all form of general and special treatment, I found a course of mercurials to promptly put an end to the hypochondriasis.

I have been unable to find any allusion to this neurosis, but my friend, Dr. Keys, tells me that he has often observed such a nervous condition as a late feature of syphilis.—*Allen McLane Hamilton in The Alienist and Neurologist, Jan. 1880.*

NOTES AND ITEMS.

ON THE REPORTING OF CASES.—The Philadelphia *Medical Times* has the following very judicious remarks upon the mode of reporting cases: "If careful consideration should be given to deciding the propriety of making any report of a case, no less consideration should be bestowed upon the method of this report. In most cases, if the descriptive powers of the writer are at all good, a graphic description of the general course of the disease is much better than the plastering down of extracts from the bedside note-book. In taking notes on an obscure case, it is often proper to put down all the details, because it may be impossible to judge what are the essentials; but when the record is complete, the important symptoms ought to be clearly perceived, and as clearly stated in the finished report. Time is so valuable, that all unimportant details must be suppressed."

THE PRIMARY LIBRARY of the New York Academy of Medicine now contains 10,000 volumes, not including duplicates. The library of the Journal Association, numbering 3,000 volumes, has been transferred to the Academy, and they have expectations of receiving another library of 1,000 volumes. It is deemed probable that before the close of the year the library will own 20,000 volumes.—[*Medical Gazette*, Jan. 21.]

DR. ORSON L. CRAMPTON, of Mobile, Ala., has been sued by his aunt for \$10,000 damages, for breach of promise of marriage. The jury found a verdict for the plaintiff, but he is striving to obtain a new trial, claiming that a marriage with an aunt would be null and void. It is a complicated case, and will become a celebrated one on account of the questions involved.

THE paper by Dr. S. G. Moses, in this issue, should be credited as "Read before the St. Louis Obstetrical and Gynecological Society, January 15, 1880."

ANTE MORTEM RIGOR MORTIS.—Alfred Finch, M. R. C. S., reports in the London *Lancet*, a case of a woman sixty-five years of age, who had abstained from the use of all food for two weeks, while suffering from mental distress. In dressing one morning she observed a numbness of the legs, and on attempting to come down stairs all power of motion was lost. Examination showed entire absence of voluntary and reflex motion as well as sensation below a clearly defined line at Poupart's ligament, where also was a well marked difference in temperature, the surface above being warm and that below cold and livid. There was also perfect muscular rigidity. Within two hours after death, which occurred fourteen hours after the development of the symptoms just related, all muscular rigidity had disappeared.

FATTY DEGENERATION OF THE HEART APPARENTLY RESULTING ACUTELY FROM HEMORRHAGE.—Dr. Goodhart exhibited this specimen, taken from a child six years old, who was admitted to the hospital on the seventeenth day of an attack of typhoid fever. About a fortnight later she had severe hemorrhage from the bowel; and also had epistaxis before death.

Her temperature had reached 105 °. Post mortem, in addition to the intestinal lesions, the heart was found to present very marked fatty degeneration; and he was inclined to refer this to the antecedent hemorrhage, rather than to the fever. He had seen four other cases of a similar condition of the heart after hemorrhage.—*Med. Times and Gazette*, Nov. 29, 1879.

HAMILTON recommends a simple expedient for the relief of the pain of intestinal colic. It is merely to elevate the hips with pillows, or over the end of a sofa. In many cases this is followed by a discharge of gas from the rectum, and entire relief of the colic. In infants, the same result may be attained by raising them by the feet, as in the act of applying a diaper.—[*Medical Gazette*, Jan. 3.

THERE is a scheme on foot in London for supplying that city with sea-water for bathing purposes. Every house will be thus provided with the luxury of the salt-water bath at will of the tenant, a great privilege for all classes. It is thought the water can be delivered from the English Channel at a rate not at all excessive.

SUPPURATIVE MYOCARDITIS IN SCARLATINAL NEPHRITIS.

Dr. Goodhart also exhibited this specimen, taken from a child three and a half years old, who in the course of scarlatinal nephritis, had galloping action of the heart without any bruit. Post mortem, the left ventricular wall was found thickened by a diffused purulent infiltration extending from the auricular attachment to the apex. In the discussion which followed the presentation of the specimen to the London Pathological Society, it was suggested that the specimen possibly illustrated the cause of the condition of acute dilatation of the heart, occurring in some pyrexial conditions as scarlet fever and acute rheumatism.

RETARDED DENTITION.—A girl aged fourteen, epileptic since her birth, had great deficiency of the permanent teeth, the upper and lower incisors being the only teeth that met. She was small, short, had curvature of the spine, and a large head, but there was no syphilitic history. No teeth had ever been removed and there was no reliable history of the primary teeth. She suffered from great want of masticating power. Mr. Edgelow thought that by adapting plates the eruption of the other teeth might be stimulated.—*Med. Times and Gazette*, Dec. 6, 1879.

DEATH FROM NITROUS OXIDE.—A death from inhalation of nitrous oxide gas occurred lately at Exeter, England. The gas was given to produce insensibility during the extraction of a tooth. The patient was a woman of about forty years of age. After a few inhalations, the pulse was noticed to become weak, and the administration was stopped for a time. As the patient had not become insensible, the inhalation was resumed, and the tooth withdrawn. The patient had become livid, and in a few minutes died. Her health had been excellent previously, and there was no reason known why she would not be a good subject for the gas. A case has also been reported in this country.

Boston Surgical and Medical Journal.

DR. H. I. BOWDITCH has resigned his position as member of the Massachusetts Board of Health, Charities and Insane Asylums, finding himself unable to discharge the increased duties devolving upon the Board as at present constituted without neglecting others.

FRACTURE OF THE TRACHEA.—A middle-aged woman while hanging out some clothes, slipped off the chair on which she was standing and fell forwards against its back, from which the top rail was missing. She fell forcibly and struck the trachea against a sharp, upright spindle. The cartilaginous rings were crushed; there was slight expectoration and extreme general emphysema. A compress of cotton wool was retained over the part by adhesive plaster, and she made a good recovery in ten days.—*British Medical Journal*.

BREATH OF DIABETIC PATIENTS.—M. Guéneau de Mussy, who, for several years, has devoted special attention to the study of diabetes, affirms that the breath of individuals affected with this disease, very often emits a characteristic sour odor, not unlike that of alcohol, resembling very closely the breath of confirmed drunkards. In several instances, this odor was so powerful as to give at once a clue to a correct diagnosis. He has observed, moreover, that the intensity of that odor diminishes as the amount of sugar in the urine decreases.—*Gazette Hebdomadaire*.

OLEOMARGARINE, according to the *Louisville Evening Post and News*, quoted by the *Louisville Medical News*, is manufactured by hastening the process of nature, changing the fat of the animal by a rapid, artificial manipulation, into a substance that any chemist will say has all the properties of butter.

AT the graduating exercises of the Missouri Medical College, on Wednesday evening, March 3d, 115 diplomas were presented to the graduates. The total number of students during the year was 300, of whom 128 made application for graduation. Five members of the class attained the highest grade attainable, the maximum mark from each professor.

THURSDAY evening, March 4th, the Alumni Association of the St. Louis Medical College, had a very pleasant reunion and supper at the Ladies' Ordinary of Faust's Southern Hotel Café. That the viands were of the choicest the name of the caterer is sufficient guarantee. Beer and wine were supplied in abundance for those who wished them; and toasts were drunk and speeches made till an early hour in the morning.

THE St. Louis Medical College announces that hereafter all students who matriculate at that institution must take a three years' graded course in order to graduate.

THURSDAY evening, March 4th, the St. Louis Medical College graduated a class of forty-one out of forty-eight applicants for graduation. More than half the graduates had attended three winter courses and three spring courses. The total enrolment of students last year was 162.

A GERMAN RAILWAY PHYSICIAN states that railway employees are more liable than other men to diseases of the spinal cord.

THE Texas State Medical Association will meet at Brenham, Washington county, Tuesday, April 6th.

SOCIETY MEETINGS.

DR. G. A. MOSES having gone to New York, Dr. Prewitt entertained the Obstetrical and Gynecological Society at their February meeting. The next meeting will be at the house of Dr. Moses, No. 3202 Olive street, Thursday, March 18th.

THE TWELFTH CONGRESSIONAL DISTRICT of the Missouri Medical Association will meet at Edina, Mo., on Wednesday, April 28th, 1880.

MORTALITY TABLE.

For the Four Weeks ending February 14, 1880.

CITIES.	ESTIMATED POPULATION	DEATHS.	DEATH RATE PER 1,000.
New York.....	1,097,563	2,997	24.7
Philadelphia.....	901,380	1,193	17.
Brooklyn	564,448	871	20.
Chicago.....	537,624	742	17.9
St. Louis.....	500,000	400	10.4
Baltimore.....	400,000	535	17.3
Boston.....	375,000	612	21.4
San Francisco	300,000	351	15.2
Cincinnati.....	280,000	317	14.7
New Orleans.....	210,000	393	24.2

ST. LOUIS COURIER OF MEDICINE

— AND —

COLLATERAL SCIENCES.

VOL. III.

APRIL, 1880.

No. 4.

ORIGINAL ARTICLES.

OBLIGATIONS OF THE PHYSICIAN TO COURTS OF JUSTICE.

BY IRWIN Z. SMITH, ST. LOUIS.

IT becomes frequently a question of law with the courts and legal profession, and a question of propriety with the medical profession, how far a physician ought to be compelled to disclose the secrets of the sick room.

Fourteen different states out of the thirty-eight composing the United States, and three territories have enacted laws, making a physician incompetent to testify "concerning any information which he may have acquired from any patient while attending him in a professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon."

The phraseology of these statutes is somewhat different in different states, but the meaning almost absolutely the same. The quotation above is an exact copy of the Missouri statute.

The New York law differs from the law of Missouri in one respect only. It provides that a physician shall not be compelled to testify to any information which he may have acquired in attending any patient in a professional character. The Missouri law says, "may have acquired from any patient." The New York law says, "may have acquired," without confining the source of information.

In twelve of the states where this law exists, this statute has never been construed by the courts of last resort. In New York, it has been many times construed, and with an unbroken uniformity, from the year 1834 until 1879. Under the common law of England, adopted by nearly all the states, a physician was not privileged from disclosing the secrets of the sick chamber, for while, under this law, an attorney could not be compelled to disclose the "communications" made to him by his client, that law had no application to a physician, nor had it any to a priest or pastor concerning the "confessions" made to him in the course of discipline required by the rules of his church.

But in 1828, the Legislature of New York enacted the law above quoted, and at the same time enacted that the priest should be incompetent to disclose the "confessions" made to him by his penitent, that the attorney should be incompetent to disclose "communications," and the physician to disclose "information."

In 1835, Missouri passed the law above quoted, which has remained unchanged until the present time.

In trial courts it has frequently become a question, under this statute, whether a physician could be compelled to testify as to any thing that he had learned from his patient while attending him, or whether the law meant merely to exclude all statements made by the patient merely, and allow all other information which he acquired while attending the patient, and by attending the patient to be disclosed.

In 1834, the question came up in the Chancery Court of the State of New York, in a divorce case, as to whether a physician could testify in regard to what he "discovered

and was informed," when consulted by a patient, and Chancellor Walworth decided that he was not only excused, but prohibited from giving his testimony.

The same question arose in the Criminal Court (Oyer and Terminer) in the State of New York, when a physician had been sent to visit a prisoner in jail, in order to examine some scratches and contusions about his face. The court refused the testimony of this doctor, because the information he proposed to testify to, was obtained while attending the prisoner as a physician.

In 1841, the same question was before the Chancery Court of the State of New York, and Vice Chancellor McCoun decided, that "when a physician undertakes to disclose matters which came to his knowledge while professionally employed, his testimony must be rejected.

The Court of Appeals of New York, in 1871, decided that it was proper to exclude the testimony of a physician, that his patient had a loathsome disease.

In 1876, Judge Sedgwick, of the Superior Court of New York, decided that a physician could not testify as to the health of his patient, at the time he made application for insurance, having obtained his information by attendance upon his patient.

But the cases in which this matter has been most thoroughly discussed, are those of *Edington vs. The Mutual Life Insurance Company*, and the same against the *Ætna Life Insurance Company*, decided in the Supreme Court of New York, and in the Court of Appeals.

Several policies had been issued on the life of one William H. Dufendorf, and by him assigned to William F. Edington, the plaintiff. The companies issuing these policies defended on the ground that Dufendorf had made false representations to the various insurance companies in regard to his health, in his application for these policies.

To prove this, the defendants offered the testimony of the physician who attended upon him prior to his insurance, and proposed to prove the state of his health. The language of one of the judges in deciding to exclude this testimony was as follows:

"The testimony of the physicians offered upon the trial, we think was properly rejected, for the reason that the information asked for was obtained by the several physicians while attending the insured as a patient, in a professional character, and was therefore privileged within the provision of a statute of this state."

"It is a just and useful enactment, introduced to give protection to those who are in charge of physicians, from secrets disclosed to enable them properly to prescribe for diseases of the patient. To open the door to the disclosure of secrets revealed on the sick bed, or when consulting a physician, would destroy confidence between the physician and the patient, and it is easy to see, might tend much to prevent the advantages and benefits which flow from his confidential relationship."

"When it speaks of information, it means not only communications received from the lips of the patient, but such knowledge as may be acquired from the patient himself, from the statement of others, who may surround him at the time, or from observations of his appearance and symptoms. Even if the patient could not speak, or his mental powers were so affected that he could not accurately state the nature of his disease, the astute medical observer would readily comprehend his condition. Information thus acquired is clearly within the scope and meaning of the statute."

This was in the year 1876.

In 1878 another of these cases came up in the Supreme Court of New York, and in giving his decision, Judge Smith said:

"The statute which prohibits a physician from disclosing information acquired by him in attending a patient professionally, prevents not only a disclosure by him, as a witness of the prohibited information, but also the giving of any answer which tends in any degree, however remote or indirect, to throw light upon the subject of the prohibition. Upon that subject, he is not to furnish any information, however slight."

In the Supreme Court of New York, Judge Gilbert in 1875, in deciding upon the admissibility of a physician's testimony, said :

“The word ‘information’ as used in the statute comprehends the knowledge which the physicians acquired in any way while attending the patient, whether by their own insight, or by verbal statements from him or from members of his household, or from nurses or strangers, given in aid of the physician in the performance of his duty. Such is the true signification of the word “information.” Knowledge, however communicated, is information. It may as well be derived through the sense of sight as that of hearing. The principle is the same in whatever way the information passes. A dumb patient and one whose vocal organs are paralyzed, are equally protected by the statute with all others. The secrets of the sick chamber cannot be revealed, because the patient is too sick to talk, or was temporarily deprived of his faculties by delirium or fever, or any other disease, or because the physician asked no questions.

“The statute seals the lips of the physician against divulging in a court of justice the intelligence—or if the word is preferred, the knowledge or information—which he acquired when in the necessary discharge of his professional duty.

“It was enacted for the purpose of extending the relation between a patient and his physician, the same rule of policy by means of which the common law protected the professional confidence necessarily existing between a client and his attorney.”

The same principle was affirmed in one of the last named cases in the New York Court of Appeals, as late as October, 1879.

It will thus be seen that, under the decisions of the Criminal Court, the Chancery Court, the Court of Appeals and the Supreme Court of New York, from the year 1834 to the year 1879, a period of forty-five years, a physician is excluded from testifying as to any information, which he may have acquired while attending his patient, no matter what is the source of that information.

During the year 1879 two causes were tried in two different rooms of the St. Louis Circuit Court, before two different judges, at different times. Each suit was on a policy of insurance, and each defendant sought to establish its defense by the testimony of physicians, who in each case had attended upon the insured.

In each case the judges decided that the physicians might testify as to any fact that they had learned from observation while attending upon their patients, but they must not disclose communications made to them by their patients. In each case the physicians, under the ruling of the court, narrated material facts, learned from observation while attending their patients. The plaintiffs objected to the admission of this testimony, and after judgment, appealed to our Court of Appeals, which reversed the judgment of the Circuit Court in each of the cases.

In the Circuit Court, on the trial of one of these cases, when the physician who had attended the deceased policyholder was asked to state his symptoms and the cause of his death, and objection was made by the plaintiff, the Judge instructed the physician as follows: "You may state without regard to anything that the patient may have said to you, without regard to any information which you may have derived from him. If the information you are about to give, is in any manner founded upon information which you derived from a statement of the patient, you will not answer the question."

The witness then went on to state facts that he had learned from observation while attending upon his patient, but stated nothing that the patient told him. He also testified as to his treatment of the patient, based upon these observations.

The Court of Appeals says this was error.

The judge of that court says in rendering his opinion, that "the witnesses should have been instructed not as they were, to confine their testimony to information other than statements of the patient, but they might with propriety have been told that they were not at liberty to testify to

any information which they had acquired from the patient, either by word of mouth, or observation, while professionally attending him, which information was necessary to enable them to treat him, or prescribe for him as physicians. That other facts they might testify to and especially any circumstances that came to their knowledge otherwise than through their relation as physicians to their patient."

The case in which the above language was used, did not involve an amount that would give the Supreme Court of the State jurisdiction on appeal, but another case, decided on the same day, and involving the same rule of evidence, has been appealed to the Supreme Court, and will in time be decided by that tribunal for the first time, and it cannot be doubted that the decision will follow, and be in harmony with, the decisions by the different Appellate Courts of the State of New York.

By a comparison with the law in regard to attorney and priest, it will be obvious that the intent of the law was to make the relation of physician and patient absolutely confidential. That the patient could disclose to his physician by oral statement, or by exhibition of his person, any and all facts concerning his health, and the causes of it, and be protected from disclosure, is manifest from the language.

If he was to be protected from a disclosure of his oral statements, how easy it would be for the law to say "oral information," or as in the case of attorneys "communications," but it says "information acquired from any patient."

Information is a more comprehensive term than communication. It embraces knowledge derived from communications, confessions, or observations, no matter how gained, so that it is gained from the patient.

How often is it a fact that the experienced physician can get more information by the inspection of an ulcer than from any oral communication that the patient can make.

How often is it the case that he forms a correct conclusion from inspection, when the statements of the patient if listened to, would lead him into error, and yet some

courts have said that one source of information is confidential, and that the higher and better source is not protected, but that the patient is at the mercy of the courts, and that all of his secrets may be divulged by order of a court.

This view will probably never again find any recognition in the courts of Missouri, but the law will be construed to mean what it was intended, to protect the physician from stating any facts that he has acquired from his patient by oral communication, by observation or otherwise, while attending him as a physician, and which facts are necessary to enable him to prescribe for him as a physician, or do some act as a surgeon.

It is contended by some that the workings of this law would, if fully carried out, have a tendency in many instances to defeat justice, that the physician could not testify in regard to the condition and wounds of his patient, who had been mortally wounded by an assassin.

But whether or not this may be so, it is for the Legislature to decide upon the policy of the law within the constitution, and it is for the courts to construe law, not to make it, or define the policy of the state in antagonism to the legislative will.

It is not so much a question for the courts, whether this law is wise or unwise, as it is to settle the question as to its binding effect.

With the decisions in New York, uniformly upholding the law for forty-five years, and with a decision by the St. Louis Court of Appeals, in harmony with the New York decisions, it is not probable that this statute will ever be construed adversely to these decisions.

To the physician who has been so frequently dragged into court, and detained there to the neglect of his business, the settlement of the question in the manner indicated will be welcome.

TYPHO-MALARIAL FEVER.

BY W. C. JARNAGIN, M. D., MACON, MISS.

[*Read before Noxubee County, (Miss.) Medical Society, January, 1880.*]

RECENT medical observers imbibing the restless spirit of the age, are ever probing deeper and farther into the vague uncertainties, that so long bound medicine as a science to a traditional empiricism; and to-day it is the "creed of the craft to accept nothing on faith, to rely on nothing as a truth except what is susceptible of actual demonstration by crucible or scalpel." It is doubtless true that this scepticism has led to a rather refined taste for subtle theories and minute and useless classifications, but this refinement in taste will appear to us pardonable when we allow ourselves to think of the confused mysticisms of the past, in which we see only the shimmering outlines of a ghostly truth.

The utilitarian spirit of to-day teaches us that there is nothing practical in crude knowledge, and that the researches of our ancestors fell far short of what was useful and practical in the study of diseases. Basing their study of morbid phenomena upon the prevailing false philosophy of the age in which they lived, they were constantly being wooed by the mirage-like beckonings of deceptive hope, from one error to another, along the barren waste of the centuries, until their investigations like their teachings closed in the darkness of an unrewarded grave.

But the purer logic, and sounder and more experimental philosophy of the present century, have wooed with a more flattering voice the fickle evanescence we call truth, and to-day we boast that we are farther from error than we were yesterday.

Experimental medicine has made wonderful progress in

the last few years towards a perfect science, and while great and useful truths have been developed, still there remain grand facts to be garnered and applied to the treatment of diseases, by future research, and this is eminently true in regard to the study of fevers—which we feel is in its infancy, and the developments in this direction are scarcely begun. We know that it is but recently that the causes of fevers have begun to be understood and investigated, that their classification has been put on an intelligent and scientific basis. It is of a quite recent date, Mr. President, that typho-malarial fever, the subject you have assigned me as the basis of this paper, has been classified as a separate and distinct type of fever in its essentialities and relations. Practical and diligent experimenters, although they have not thoroughly satisfied us as to the true and exact conditions necessary to the development of this disease, have certainly brought to light, salient points sufficient to convince us of its separate and distinct individuality, since under the critical examination of modern medicine, who can say that the group of morbid phenomena presented in the study of this diseased condition, can be fully explained under the classification of typhoid fever, the only member in the catalogued group of fevers, that at all simulates the disease under discussion? For we find in the study of its clinical history, that although it is a dyscrasic fever, with all the most striking ataxic symptoms that attend typhoid fever, still we recognize in its course, distinct and sometimes frequently occurring remissions that would point with a decided significance to a malarial nature, but it would certainly be a work of supererogation on my part, to attempt to prove to this intelligent body the non-identity of typhoid and typho-malarial fevers, a fact as conclusively settled as the distinctive difference between typhus and typhoid fevers.

The *true* nature of typho-malarial fever has been investigated with a good deal of interest by the best thinkers in the profession, with as yet anything but a conclusive result; its complex and combinative character has given

rise to a diversity of opinion. By some it is considered a hybrid fever, combining both the essential elements of malaria and the specific poison of typhoid fever. By others it is supposed, that it combines malaria and a septic poison, which differs from the specific poison of typhoid fever. While it is held by others, doubting the existence of such a form of fever, to be nothing more than a typhoid condition, liable to be developed in connection with remittent fever, as is sometimes the case with pneumonia and other diseases.

In studying this medical anomaly, it would be profitable for us to ask what is the nature of the poison that gives rise to it, and had our science reached so far as to disclose to us the real chemical constituents of the separate poisons that enter into the combination, we would encounter but little trouble in explaining its dual existence; but at this stage of medical knowledge we only know the conditions that develop the miasmatic poison and the specific poison of typhoid fever, and of the real existing poison itself, we have no accurate conception; we cannot assert positively, whether it is a vegetable or animal organism, a gas or what. In view of the absence of well ascertained facts on this subject, we can only approximate the truth by reasoning from the visible and tangible effects through the conditions requisite for the development of these poisons to their nature. By this process of analysis I cannot conceive it a bold assumption to believe the miasmatic poison and specific poison of typhoid to be gaseous in their nature. In the investigation of the different specific poisons that cause the different essential fevers, we curiously enough, it seems, note a striking uniformity in the conditions requisite for their separate development or production.

In malarial fevers, a certain degree of heat, moisture and vegetable matter is required for the poison generation. In typhoid fever, a certain degree of heat, vegetable matter, and human excrement is required for production of its peculiar poison. In yellow fever, a certain degree of heat,

moisture, animal and vegetable matter is requisite for the production of its specific poison. Now is it at all unreasonable to suppose that, if the conditions for the generation of these different poisons are so similar, the poisons themselves, the products of the above conditions, bear a close relationship and have decided chemical affinities for each other? And in noticing carefully the separate factors of these conditions, is it not simply plain and clear that they would produce *gaseous* products, as is the case with all other decompositions. Then why say as we have all been taught, that the poison evolved from this decomposition, is a *something* which has no "tangible, microscopic, or even chemical constituents?" I cannot conceive that this explanation expresses an existence at all. It is certainly not an adequate expression of vitality for a thing that is so capable of rapid reproduction, and that produces such veritable and malignant fevers.

I know of nothing that *is* in nature anywhere but what has a chemical existence and is controlled by definite chemical laws. She has her protean primary elements that are ever restive and ready to pounce upon and unite with other elements, or combinations of elements, as they exist in nature everywhere.

And if it is true, as we know it to be, that, for the generation of these peculiar poisons which give rise to miasmatic and other fevers, it requires heat, a force governed by fixed chemical laws, moisture, a condition subject to chemical influence, and vegetable matter, a veritable chemical compound; why should there be evolved from this chemical union, a something that is not chemical, material or microscopic, but a spiritual emanation, perhaps higher in its refined and subtle existence than the elements or the laws that formed it, neither subject to man, nor through chemistry to nature, but to God only? Hence we are driven to this conclusion in regard to the separate poisons that produce miasmatic and typhoid fever, that they are gaseous products of animal or vegetable decomposition, with a definite chemical existence, having no tangible or visible manifes-

tation of their presence except by their effects, and that the specific poison that produces typho-malarial fever is distinct in its individuality and chemical existence, being the resultant product of the chemical union of the gaseous poisons which produce typhoid and malarial fevers, these having decided chemical affinities, uniting with each other in a chemical combination, forming this separate and distinct septic poison, which, under favorable anti-hygienic conditions, gives rise to the train of morbid changes seen in typho-malarial fever.

I cannot conceive it to be rational to adopt the peculiar theory of the day, that the specific poison that produces this essential fever is nothing more than the mere association of the malarial and typhoid poisons, each acting independently upon the blood and nervous system of the patient, neither modifying the other; for, if this were the case, why would not the excrement of the typho-malarial patient, under favorable conditions reproduce the typhoid poison, as this is now the conceded vehicle of conveyance of this poison?

It is a truth now well established by carefully demonstrated facts, that the fecal discharges of those sick with typho-malarial fever, will not, under any circumstances, reproduce either typhoid or typho-malarial fevers; and further, by a careful examination into the morbid anatomy of the enteric lesions of these two fevers, we find that there is a marked difference in the local lesions produced by the two poisons. With the indulgence of the society I will abstract from the report of Dr. Loomis, who claims that the result of his post mortem researches in this direction coincide with those of Dr. J. J. Woodward, U. S. A., whose investigations into the morbid anatomy of this disease are now considered all but exhaustive:

“In the earlier stages there is little to distinguish these intestinal changes from similar ones which develop in typhoid fever, except, perhaps, the tendency to the deposit of black pigment in the enlarged follicles; in a later stage certain peculiarities are present which are often sufficiently

distinctive to designate the case "as one of typho-malarial fever. There is a gradual elevation of the mucous membrane surrounding the enlarged follicles, which, if ulcers exist on their edges, reaches a thickness from three to six lines. These ulcers differ from those of typhoid fever in that the enlarged patches rise abruptly from the mucous membrane, and in such a manner that the summit is often larger than the constricting base. Besides, the umbilical depression so often seen in ordinary typhoid fever patches prior to ulceration, is rarely observed in typho-malarial fever. These changes in typho-malarial fever have no regular stage of development marked by days and weeks; the processes are slower in their development and the presence of pigment in the enlarged and ulcerating follicles stamps it as depending upon an essentially different exciting cause. Hence, although the intestinal lesions of this fever very closely resemble those of typhoid fever, they are not identical, but evidently belong to another type of fever."

Morbid Anatomy.—There is very little in this disease that is characteristic as shown by pathological changes.

"The liver is increased in size, sometimes presenting a bronze color, and at other times resembling the liver of yellow fever."

The spleen is always enormously enlarged, softened and almost black in color; heart pale and flabby, there being present, granular degeneration of its muscular fibres.

The enteric lesions are the most characteristic, morbid changes of this disease. This we have noticed fully above, in the discussion of the nature of the fever.

There are some changes which take place in the blood, but are not of sufficient practical importance to detain us in the enumeration of them.

Symptoms.—A brief synopsis of the leading symptoms of this disease will suffice our purpose to-day. There is generally a distinct chill, which ushers in the febrile paroxysm, the thermometer registering in a few days 103° or 104° F.

We do not see the typical rise of temperature that is always observed in typhoid fever. On the contrary, owing to the malarial element in the disease, there is most generally present a tendency to periodicity.

There is present in the commencement of the fever, more or less hepatic tenderness, with enlarged spleen; both these symptoms increase in intensity as the disease advances.

During the first ten days of the fever there is observed some iliac tenderness, diarrhea, with tympanitis, though sometimes this symptom is lacking. The diarrhea may be present from the beginning but is not usually a symptom of any prominence before the latter part of the fever.

The pulse-beat scarcely ever reaches over 100 per minute, except in the latter stages where it becomes rapid from exhaustion.

The tongue does not indicate anything characteristic; at first pale, flabby, it soon becomes red, with brownish coating, or in severe cases where the vital energies begin to succumb, it becomes clean, shining, and sordes collects on the gums and teeth.

The fever does not begin to abate before the third week, and then recovery is tediously slow and attended with some diarrhea, mental obtuseness and more or less cardiac irritability.

In bad cases we have a harsh, dry skin, with a strong tendency to bronzing.

All the secretory and excretory functions are more or less interfered with. The urine is scanty and frequently suspended entirely. I well remember a case I once saw, in which all the grave symptoms of the disease were present, with an entire suspension of all the secretory functions, except that of the kidneys, that had the most excessive secretion of urine I ever saw; his mental condition was such that the catheter had to be used twice daily, and each time two-thirds of a large chamberful of urine was drawn off.

Headache is generally present, sometimes coming on at the beginning; as the fever progresses, there is decided delir-

ium, in most cases of a low muttering character, generally accompanied by restlessness, subsultus, picking at the bed clothes, and other symptoms of physical and nervous decadence, followed by decided and very persistent insomnia, though in some cases I have seen the headache give place to extreme deafness, which in its turn, is followed by stupor or coma and in others by active and boisterous delirium, due probably as some think, to inflammation and effusion upon the brain.

As the fever goes on into the third week there are present all the symptoms which indicate failure of the vital powers, rapid and feeble pulse, showing cardiac insufficiency, dusky appearance of the skin, capillary congestions, muscular weakness, slipping down in bed, etc. When this fever occurs among those suffering privations, as overcrowding, poor and scanty food, we have some modifications of the disease. The fever is of a lower and more dangerous type. All the typhoid symptoms are exaggerated, more constant and profuse diarrhea, hemorrhagic tendencies of all the mucous membranes. This is the form of fever so prevalent during the war, and called "Chickahominy Fever."

Bronchitis and pneumonia frequently complicate this disease.

By a careful study of the symptoms already detailed, there will be very little difficulty in differential diagnosis or prognosis.

Treatment.—It will be impossible to lay down a regular, formulated plan of treatment for this disease, varying in its type as it does, according to the surroundings and the conditions which gives rise to it. The physician will rely upon his study of the clinical history in each individual case, and put the patient upon the plan of treatment which his own good sense and practical knowledge will suggest. There are no specifics in this fever, and no abortives—the treatment is expectant. Every precaution should be taken to surround the patient with the best hygienic conditions possible. In regard to the therapy of this disease, we find that but little medication is necessary, and the fewer drugs

used the better—use no medicine without a distinct and sensible purpose. Be always on the alert and meet every call of nature for help promptly and intelligently and thus give the patient a chance to make it to the shore.

In the beginning of the first week of the fever, it is the best plan to give decided doses of quinine, say ten or fifteen grains night and morning for three days, with a view to control as far as possible the malarial element, and thus make the fever run a milder course.

When an antipyretic is necessary, nothing is at all comparable to large doses of quinine. The quinine, although given by some for this purpose, has no controlling influence over the local enteric symptoms.

If the pyrexia is very great and seems to threaten life, and is not controlled by large doses of quinine or digitalis, the temperature can best be lowered by the cold bath or cold pack.

When the vital powers begin to show signs of failure, the administration of alcoholic stimulants becomes an imperative necessity. The effects of the first few doses should be most carefully watched, so as to avoid the danger from over stimulation. The quantity to begin with, will depend upon the type of the fever and former habits of the patient. When stimulants are used it is always better to give them so as to keep up an equal and temperate amount of stimulation. It is rarely necessary to commence their use before the middle or latter part of the duration of the disease. The fact of delirium being present should not deter us from their use, when it is necessary that they should be given, unless it increases the cerebral trouble.

Delirium depending upon prostration and anemia of the brain is readily and effectually quieted by alcoholic stimulants.

If constipation exists it would be well to give a mild saline purgative, or a gentle enema.

If excessive and exhaustive diarrhea is present it is best controlled by bismuth and opium, or opium and the turpentine emulsion.

If the patient is threatened with suppression of urine, ward off the danger by the administration of large doses of digitalis.

If the skin is harsh, dry and hot, sponge the body over frequently with tepid water.

Opium is far the best and most certain remedy to relieve persistent insomnia with restlessness and delirium.

When there is evidence of heart failure, and the general vital energies seem about to succumb, give digitalis and strychnine every three hours until physiological effects begin to manifest themselves.

CASES FROM PRACTICE.

A CASE OF CARCINOMATOUS STRICTURE OF THE ŒSOPHAGUS.

BY L. P. POLLMANN, M. D., ST. LOUIS.

The general interest attached to the diseases of organs with but a limited physiology and a consequent narrow pathological range, is sufficient warrant to bring any of their affections to the notice of the medical world. And this interest involves a claim of publicity when the varied appearances of the pathological picture, as well as their admitted manifold interpretations, touch upon questions which, though they have occupied the minds of investigators for centuries, are not definitely settled yet. The case alluded to in the superscription, presents no rarity or peculiarity of the lesions, but will enlist more than usual attention as regards the seat and clinical course of the morbid process.

In May, 1879, K. W—— applied to me for treatment of some ailment in his chest, as he thought. He was a native of Germany, sixty years of age, a miller by trade, to which he adhered

without interruption all his life. He was irregular in his habits, inclined to intemperance, and decidedly addicted to the stronger alcoholic beverages. According to his statement, he was not conscious of any hereditary disease in his family, and as for himself, had always been a healthy man, and was at no time the subject of lues. Slight cough, a feeling of oppression increased by any attempt at deglutition, and dull pain shifting more or less in character, but more in the left half of the thorax, were the main features of his complaint. The abdominal organs functionated regularly and in no other portions of his system had deviations from the standard of health been observed.

Status præsens.—Patient is of medium height and shows, aside from incipient senile withering of the skin, a fair development of the pannicular and muscular tissue. The costæ are unusually prominent, and a limited expansive excursion of the ribs, probably due to calcification of their cartilages, is noticeable at once. Relaxation of the intercostal muscles, as often seen in individuals with chronic bronchial catarrh, or the victims of phthisis, is also plainly marked. Physical examination of the lungs elicits nothing abnormal, except a feeble respiratory murmur, somewhat prolonged expiration and a few scattered mucous râles. The left side of the chest was examined with scrupulous care, to account if possible for the pains there experienced but the examination failed to throw any light upon the case. The abdominal cavity as well as the uropoetic system gave no evidence of disease. Inspection of the fauces revealed chronic pharyngeal catarrh with relaxation of the mucous membrane, and atrophy of submucous tissue.

With this almost negative result of physical exploration before me, no apprehension of any œsophageal trouble was had, the supposition being that the lesion was a bronchial or peribronchial one, with emphysematous complication, and caused, in all probability, by the inhalation of dust and lime particles, to which for a long time he had been exposed. About a month after the first call, the patient presented himself again at my office, and now complained of difficulty of deglutition, and distinct regurgitation while eating. He had observed that on swallowing moderate sized morsels of food, an inverse movement occurred before they got entirely down. Small quantities of nourishment could be made to pass without obstruction, and were well tolerated. The swallowing of fluid

substances presented no symptoms at first, but toward the latter end required the same precaution which he was wont to exercise for solids. During all this time the pains above mentioned varied in intensity, but were never so severe as to require any special medication. Examination of the œsophagus by olive-pointed bougies, was resorted to at the patient's second visit, and revealed a slight narrowing of its lumen, manifested by a tight constriction around the instrument when arriving at a certain depth, which corresponded to about the sixth or seventh cervical vertebra. The constancy of this symptom, evinced during repeated exploits, dispelled all suspicion of spasm of the organ, and together with the peculiar sensations propagated by the bougies to the guiding fingers, strengthened the thought entertained from the start, that stenosis of the organ was produced by some new formation within its walls. The nature of the same was not determined upon, as no clue could be derived from the deportment of the cervical glands or the patient's general condition. The only fact deserving consideration in discerning the character of the tumor, and pointing to an unfavorable prognosis, was its comparatively rapid growth in a few months, from a slight constriction, to such a considerable stenosis of the œsophageal lumen, that it barely admitted a No. 21, olive-pointed bougie. At no time of the duration of the illness was there any fever, the only general symptom perceptible being gradual waste of all tissues, increasing to complete emaciation and extreme impoverishment of the blood with symptoms of anemia and atrophy of the brain. The patient died, seven months after the first traces of the disease had become manifest.

Little need be said about the treatment. The general course pursued was an invigorating one, concentrated broths, milk and eggs being administered. Locally, systematic dilatation, by suitable instruments, seemed to give the most rational hopes of temporary success, though it was plain that the final catastrophe could not be averted very long. In this light also, the question of establishing a gastric fistula for the purpose of nutrition, was decided in the negative, as the commencing cachexia and diminished power of resistance had already lessened the chances of a successful operation.

At the post-mortem examination which I was enabled to hold, with the kind assistance of Drs. Kirchner and Evers, the

lungs were found to be the seat of strong pigmentation, and extensive conglomeration of lime particles. Aside from this, no structural changes were apparent, but it must be stated that by request of the relatives, the investigation was limited as much as possible, and no further attention therefore paid to the lung tissue proper. I may add that two exactly symmetrical bands of adhesion were the only pathological features offered by the pleura.

In order better to survey the relations which the morbid alteration bore to the neighboring organs, the tongue, larynx, trachea, œsophagus and stomach were removed *in toto*, and presented appearances of great pathological interest. The posterior wall of the œsophagus being opened, the seat of the stricture was discovered about four inches from its upper entrance at the *cavum pharyngeum*.

The new formation was situated in the anterior half of the tube, of an ovoid form, measuring an inch from pole to pole, and three-eighths of an inch in width, of fibrous consistency, flattened anteriorly and posteriorly, its transverse diameter corresponding to the median line of the body, the poles tapering into the lateral portions of healthy œsophageal tissue. The mucous membrane covering its internal aspect was intact. Below this narrowed part the organ showed no evidence of disease for two and three-fourths inches of its length; at this point, on a level with the bifurcation of the trachea, an extensive ulceration was met with, involving the whole thickness of the walls, and extending to the cardiac orifice of the stomach. The greatest part of the mucous membrane was destroyed by molecular disintegration, the remaining parts being undermined, and covering sinuses which led into the submucous and muscular coats. These were thickened partly by plastic infiltration (the result of collateral hyperemia), partly by a neoplastic tissue identical with that constituting the upper constriction. The ventricular orifice itself was intact and the rest of the organ presented no abnormality save a uniform atrophy of its walls. The bronchial glands, especially those at the tracheal bifurcation, were enlarged and excessively pigmented. The abdominal cavity was not examined any further. So much about the macroscopic appearances.

The microscopic picture, for which I am indebted to Drs. Evers and Hambach, proved the parts immediately surround-

ing the ulceration to consist of fibrillar, connective tissue stroma, between the bundles of which were interspersed numerous lymph corpuscles. The decisive argument in favor of the epitheliomatous nature of the lesion, was the existence of several well preserved nests of caudate cells, embedded in clefts of the stroma or circular spaces, the shape of which was probably determined by the cell aggregation itself. The tumor forming the upper constriction did not give a very intelligible image of any pathological affection. There was a strongly marked connective tissue stroma, with promiscuously intermingled lymph corpuscles, no trace of newly-formed blood vessels or lymphatics; these were its most striking characteristics.

Epicritical remarks.—The appearances presented to the naked eye alone, sufficiently warrant the deduction that the morbid process at the lower extremity of the œsophagus was of longer standing than the one at its middle. The retrograde metamorphosis, as well as the necrotic processes on the surface, all go to confirm our view. It is also a fact, long known to pathological anatomists, that canceroid tumors of the organ in question, develop, as a rule, at the lower portion of the same, more particularly at that point where the bifurcating bronchi cross it. The specimen before us, is in perfect harmony with this experience, and thus touches upon a subject which is still occupying the closest attention of all pathologists, the etiology of epitheliomatous and cancerous growths. From the vaguest theories offered by the old physicians, the mere outgrowths of their imagination, and lacking all anatomico-pathological truth, up to the more modern view which ascribes to mechanical insults the first impulse toward the evil, and cannot do without the assumption of a certain undefined predisposition, all have failed to unite harmoniously the clinical and anatomical facts. It is not one of the smallest merits of Prof. Cohnheim, the genial teacher of pathological anatomy in the University of Breslau, to have directed the labors of investigators into a direction which alone is likely to throw light upon the dark field of the pathogenesis of tumors, by pointing out first their probable embryonal origin.

According to his opinion, all neoplasms are the result of embryonal cell-remnants, which occur frequently as the consequence of developmental complications at those places where cell and tissue differentiations physiologically take place in in-

tra-uterine life, or at the boundary lines of two varieties of the same structure. These cellular remains may lie in the fully-grown tissue, and never attain any development. To say nothing of the army of exciting causes by which they may be stimulated into renewed activity, according to our author, the absence of physiological excitants suffices for an atypical production of those dormant germs. Applying these considerations to the case above described, we find the original seat of the affection, one eminently fitted for physiological complications, so to speak. The Œsophagus and trachea, though recognized as two distinct tubes in the earlier phases of embryonal life, remain for a time in such close contiguity with one another at their lower extremities that the connecting structure forms the anterior boundary for the Œsophagus, while it limits the trachea posteriorly. If, during the differentiation in the cellular partition-wall, some of the epithelial structures of which the Œsophagus is made up, are not utilized during its construction and remain behind, the first condition for a heterogeneous growth is given. All that is needed is an agency calculated to inaugurate a new cell-production in these remnants of a former period, and a neoplasm is at once generated, the atypical character of which constitutes it a foe to the surrounding tissues. These agents or exciting causes may be varied. A simple collateral hyperemia in the neighborhood of an abrasion or erosion of the mucous membrane, contiguous inflammatory processes in the adjacent bronchi as well as vertebra, a simple hyperemia even, kept up for some time by irritating articles of food, all these may tend to initiate a most destructive movement, for which our therapeutics have so far failed to devise the remedy. The upper nodule was evidently a secondary one (daughter-nodes, *Tochterknoten*) and presented interest only through the fact that the cells it contained, were not fully formed epithelial cells, but belonged rather to an earlier stage of development, approaching in their character the lymphatic corpuscles.

THE PAPER BRACE IN LATERAL CURVATURE OF THE SPINE.

BY A. J. STEELE, M. D., ST. LOUIS.

Presented to the Medico-Chirurgical Society, November 10, 1879.

I wish to exhibit to the members of the Society, a brace I have just finished for a case of rotary lateral curvature of the spine. The deformity is in a young man aged 18 years, of a pale, sallow complexion, but well developed and of good general health.

About six years ago he was first observed to have a slight curvature of the spine, which gradually increased until, two years later, the family physician sent him to an instrument maker to have a steel brace applied. This was done, and an apparatus worn for several months without apparent benefit. An examination at the present time reveals a marked lateral curvature to the left in the thoracic region, and a slight lumbar, compensatory, curvature to the right. The left shoulder is one and a half inches higher than the right, and quite prominent posteriorly, indicating a rotation of the bodies of the thoracic vertebræ to the left. There exists also a marked posterior curvature in the dorsal region—a cyphosis—which seems to be permanent. While the patient experiences more or less weakness of spine and body, yet he suffers no pain unless from continued or severe exertion. He does not know to what to attribute his deformity except that between the ages of nine and thirteen years, he rode horses bareback, more or less constantly. But even in that I fail to find any relation of cause and effect.

If we were to divide lateral curvature into four classes, as indicating the different degrees of deformity, the highest being the most severe, I should place this case in the second class.

There are two exceptional phases worthy of note in this as a case of lateral curvature, namely: that the sex is male, and that the thoracic deformity is to the left.

The treatment I have suggested is, first, to rectify the deformity of the body—straighten the spine—and second, to

retain it in its improved position. The first indication may be accomplished by methodical exercise of the muscles, both active and passive; the second by the wearing of an appropriate apparatus or body brace.

The most important exercise is suspension, more or less complete, of the body by the hands, the hand corresponding to the lateral concavity, the right hand in this case, always being the higher of the two. This suspension and accompanying exercise is best accomplished on a vertical ladder, the rounds of which are quite near together; the patient climbing up and down by the hands without resting on the feet, or if at all, only on that foot corresponding to the uppermost hand. The trapeze also furnishes a most valuable means of giving an improved position to the spine, and of exercising the truncal muscles. In standing, the weight of the body should always be thrown on the side agreeing with the chest concavity. The recumbency should be on the side of the convexity, with a large, firm pad, well up under the axilla.

These and several other, both active and passive exercises, (electricity to the muscles should usually be included), were advised, the effect or tendency of which is to straighten or untwist the spine.

The second indication, namely, to retain or keep the body in the improved position which the exercise and suspension have given it, will be accomplished by the brace I here show you. It is made chiefly of paper, stiffened with glue, and is so light, so strong, so accurately fitting and so convenient in its application and removal, that it must certainly be considered a great improvement over the plaster of Paris brace or jacket. It was formed over an accurate bust or cast of the patient, while in his most improved position. He was suspended, the left hand being the highest, and an ordinary plaster jacket taken which, when hard, or sufficiently "set" was cut down in front, removed, the edges brought together again, tied, and then filled with plaster of Paris. This soon hardened and the outer casing was removed, leaving a perfect bust of the patient, over which was formed the brace I exhibit; composed from within outwards, of one layer of canton flannel, two of thick paper, and one of muslin (bandage), all thoroughly saturated at the time of application with a hardening mixture composed of white glue one part, oxide of zinc two parts, and boiling water six parts—by

weight, after a suggestion of Dr. D. Hayes Agnew, of Philadelphia.

Narrow steel springs were introduced between the layers of paper, one and one-half inches apart, vertically around the brace. When the whole was thoroughly hardened, requiring forty-eight or more hours, it was cut down in front and the two sides united with straps and buckles.¹ After being tried on the patient, the top and bottom were cut or trimmed, as found necessary, and afterwards all the edges were bound. The hardening material of the jacket being impervious to moisture, twenty or more holes were cut in different parts of the brace with a large, leather punch or gun-wad cutter, to allow for the transpiration of the sweat.

The patient should be suspended while the jacket is being applied and laced; and it may be worn constantly, or only in the day-time while up and about.

Dr. Vance, who makes the suggestion of this paper brace, advises that a piece of sheet rubber, six inches wide, be stretched from side to side within the brace, and fastened in such wise that more constant pressure, through the elasticity of the rubber, shall be made on the most prominent part of the chest deformity. I have tried the suggestion (and even in the present case) but cannot say with especial benefit. Instead, I prefer, as the shape of the patient improves, either to make a new jacket, or to cut out of the old one from the upper edge of the most prominent part, a triangular piece or dart, and bring the edges together and apply over both the outside and inside a few strips of cloth saturated with the glue mixture.

I have had occasion to make several of these jackets for patients with spinal trouble, and confess to the satisfaction they give. The advantages of the glue and zinc mixture over the plaster, are that it is lighter, stronger, and less friable. The latter quality of being less liable to crack and break, is an important requisite when it is desirable to have a *removable* brace. If the body support is to be worn constantly, the plaster jacket first applied will answer; but if it is to be removed, as when worn only in the day-time, then the paper brace is greatly pre-

¹ The jacket may be laced through eyelet-holes, or what I now prefer and use, over hooks, same as are found on gentlemen's shoes, a little "set" being required for the purpose of fastening them in.

ferable. There is more extra trouble required in its manufacture, it is true, but the question is not one of trouble, it is of efficiency. And still the making of the brace is not so difficult but that any practitioner, with the exercise of a little care, can make it.

TRANSLATIONS.

ANTHROPOLOGY.—CRANIA OF MURDERERS.

Translated by Paul E. Fiquet. St. Louis.

The numerous crimes which have, of late, come to public notice, seem to give some ground for the raising again of a question which has long been the subject of profound controversy, namely :

1. "Is an assassin acting as a fully rational being?
2. "Or, is he a separate, ill-balanced being, yielding only to tendencies due to a special status of his organism?
3. "Must we, in short, admit, according to Dr. Maudsley, that *the criminal class constitute a variety of the human species, distinguishable only by peculiar characteristics, and distinguishable too, from other men, as much as a black-headed sheep from all other races of sheep?*"

Recently, Dr. Bordier has published quite interesting investigations, which seem to be apt to throw some light on this complex and difficult problem.

The Museum of Caen had sent to the Paris exhibition of 1878, a collection of French guillotined murderers' crania—thirty-five in number. The Museum of the Paris Faculty of Medicine, had also sent one. There were all these thirty-six crania at Dr. Bordier's disposal. By a careful inquisition, he was able to compel them to testify, in an undeniable way, to the investigations as to their origin, and their collective or individual care.

With the aid of the *Gazette des Tribunaux*, he was also enabled to reconstruct the antecedents of said criminals and to put their *judiciary* docket face to face with their *anatomical* one. The comparison of these documents brought the author to quite interesting results, one of which was that the volumetric measurement of said crania was larger than the average of other people's, although it is adopted as a general thesis that a large head is a sign of superiority in mental faculties. But a single large head taken from amongst others of the same race of men, no more indicates intelligence, than a small head does mediocrity of mind; but each of these conformations affords a presumption in one way or the other.

Thus, the skulls of savages are generally smaller than ours; those belonging to people of mediæval ages are not as large as those of the present age; the crania buried in the potter's field, are smaller than those of the well-educated middle class, (*bourgeoise*), etc.

As an instance of the above, we will state that Dr. Bordier found the following average figures on Parisian crania, present age:

Twenty-two per cent. had a mediocre capacity, (1300 to 1400 c. c.) while in the same number of crania of assassins, he found only eleven per cent. of equal capacity.

On the other hand, taking into consideration large heads only, we find that murderers average an extraordinarily large number amongst them. Their cubic capacity, ranging from 1600 to 1700 c. c., is, in the same proportion, of quite frequent occurrence. We must add, at the same time, that only three per cent., of *honest* Parisians reached the above capacity, whilst of murderers there were twenty-three per cent. Amongst the crania of the *Western Cemetery*, (*Cimetière de l'ouest*) there was not a single measurement over 1900 c. c.; but three per cent. amongst assassins, measured from 2000 to 2100 c. c.

Accordingly, one would be singularly mistaken in accepting or considering, the largeness of the head as an absolute characteristic of honesty and intellectual superiority; criminals and honest people can very easily compete, so far as the volume of the brain is concerned. For instance, the skull of *Descartes*, preserved yet in the Museum, does not measure more than 1700 c. c., which though voluminous, has often been

exceeded by assassins. The skull of *Volta* measures 1850 c. c.; that of *La Fontaine*, 1950 c. c. Then, is the large size of the head only *one* of the factors characterizing the individual intellectual value? Happily here ceases the resemblance between the crania of the assassins and honest people.

It is not a new and doubtful theory that intellectual faculties reside in the anterior part of the skull. The ancient Greeks, too, endowed the Olympian Jupiter, with a forehead so wide and so high, that modern pathologists would be perfectly right in considering it as a monstrosity. And yet a murderer's forehead is exceptionally small. Never did one of the past or present human races, (on our continent), present such a narrow forehead, as do thieves. We should go back to pre-historic times, in order to meet with men having foreheads analogous to those of criminals.

The different human races, of all epochs, in our country, always measured more than 1000 m. m., as frontal curve. The curve of crania in the *Western Cemetery*, (which represents our modern generations) however, reaches to 1100 m. m. Those of assassins do not go beyond 998 m. m.

If, in criminals, the *frontal region* lacks in development, the *parietal zone*, shows a characteristic difference, and this part of the encephalon is particularly interesting. In this region have always been located the seat and origin of voluntary motion, the impulsive faculties, etc.

Dr. Mierzeyski, noticed in the exceptionally small head of a man of absolutely *apathic* temperament, the atrophy of the said zone, whilst, on the contrary, this identical region was found *hypertrophied* in individuals of restless and disturbed mind.

The most prominent characteristics manifest in the prehistoric human race, are a very small frontal region, and a large parietal one; that is, little meditation and thinking, and more action. The like characteristics are plainly observable in our modern assassins.

The necessity of an *active* mode of life and the development in our ancestors of the corresponding organs, can therefore be readily understood. The way of living in a savage state, creates special faculties or senses. Danger is constantly imminent, hence the impulsive centers of the brain had to have an extension corresponding with such an adventurous life. In modern society, the *thinking* has progressively mastered the

activity, consequently the lobes of the encephalon have been gradually subjected to corresponding modifications.

Dr. Bordier remarks:

"In our modern society, the criminals behave exactly as would prehistoric men in a civilized country; they can be properly compared to certain animals, whose parents were long ago domesticated, tamed and used to work, and which would suddenly show up instincts of savage animals. We can daily observe, among the different species of domestic animals, individuals of the same kind, which always remain restive, untamable, unconquerable."

Summing up Dr. Bordier's statements, we find that the intellectual inferiority of criminals is made most evident by a very small forehead, and a large parietal region. If the volume of the brain is great, it is accounted for by the fact that the head is extra elongated; the skull gains in height and length what it loses in width by a considerable increase of the antero-posterior part of the brain. The craniological examination is fully sustained by the biological observations made by physicians in several prisons. Dr. Nicholson, the English scientist, utters the following about criminals: "Their intellect is not strong enough to cope with their impulses." Further he says: "The obtuseness of ideas prevents them from aiming at things interesting as well as useful. Their will shows itself generally by sudden impulses, and egotism is nearly their *only* motive." In short, criminals are characterized by an uncontestable intellectual inferiority.

The deduction from the preceding is, that man may be born a criminal. His encephalic conformation prepares him for crime. The inclinations of our prehistoric races would again assert themselves by a kind of atavism. In fact, in assassins, are to be found the same superstitions, weaknesses and puerilities of former ages which we yet see in savage tribes of the present age, allied with grossest bestiality.

Drs. Bordier and Nicholson both concur in this serious sentence, "One may be born an assassin," which is, however, corrected by this following incidental one (and one on which we particularly insist), "but one may become such."

Of course, we do not mean to say, that a child born an assassin will certainly become one. It is simply understood that the encephalic conformation will have a potent influence on the instincts of the man.

Dr. Bordier's scientific investigation brings to light several instances of atavism and heredity, adding great strength to his opinions. It is quite certain that criminals can be traced back to assassin ancestors. Nevertheless, and notwithstanding such striking coincidences, we are not yet authorized to express a definitive opinion based on observations on thirty-six skulls only. The figures are too limited to allow the formulation of such a wide conclusion.

Be it as it may, if a man can be born an assassin, he can still easier become one. Examination of guillotined criminals' skulls, reveals in all these wretches a cerebral disease. Crime is often the absolute consequence of a morbid state. As Maudsley says, the criminal belongs to the median zone between sanity and insanity of mind. In one hundred crania of assassins there are only eight found to be absolutely normal; thirty-three are abnormal, though not being positively pathological, and fifty-nine are crania of diseased individuals.

On the crania of the Caen Museum, Dr. Bordier noticed numerous traces of lesions, troubles in evolution, asymmetry, protuberance of occipital or frontal bones, premature ossification of sutures, etc. We will mention particularly only one of the most important lesions, indicating the existence of a previous meningeal inflammation. Fourteen out of the said thirty-six crania presented signs of this alteration; and in thirteen out of this fourteen, this limited meningitis had existed precisely in that parietal region so largely developed in assassins.

In insane people, this same cranial region is quite often the seat of an exaggerated temperature, proving of itself an abnormal activity in close neighborhood to the motor centres. Intellectual weakness is coupled with osseous lesions of the cranium.

A few examples will prove it:

Bance, (age 28), executed April 7, 1852; osseous lesions, premature ossification of sutures.

Lescarbelle, (age 21), executed August 3, 1829; pathological lesions, parietal hyperemia.

Pierrelle, (age 20), same date; parietal predominance.

Lacenaire, (age 34), occipito-parietal preponderance.

Bloch, (age 34), executed February 24, 1839; sub-cerebral and parietal development of the cranium, etc., etc.

We have to take in consideration also the influence exercised by one criminal on another when concocting a crime. Such

seems to have been the case with *Abadie* and *Gilles* (guillotined at the end of last year). In such occurrence, the parietal hyperemia is considerably more marked in the one who acts as the *impulsive* motor to the enactment of the crime.

Therefore, it can be said that professional criminals are most generally affected with a true cerebral monstrosity, which, according to Dr. Bordier, is sometimes the result of an evolution previous to birth, and sometimes a direct consequence of a pathological process subsequent to birth. The different conditions of social medium, bad examples, temptations, want of education and instruction, either retard or facilitate the moving on of this process; and the eventually determinative cause may take a long time to make itself known, or even not be produced at all. A man may become a criminal solely because some affections of his brain or cranium were left unattended to at the beginning, during his childhood, exactly in the same manner as a man remains lame and deformed for life, if the affections of his skeleton or marrow were neglected in proper time.

Thus many, though innocent in mind, become criminals in fact.

ECHINOCOCCUS AND SPONTANEOUS FRACTURE OF THE THIGH—
REPORTED UPON BY VIRCHOW.

BY DR. KANZOW, POTSDAM.

Laborer, 35 years old, well developed, muscular, skin of healthy appearance, adipose moderate; entered hospital with fracture of the right thigh, May, 1878. Had always been healthy, but in his fourteenth year had broken the right thigh in leaping a ditch; the fracture healed very slowly in five months. There was a slight shortening of the limb, and subsequently he observed some unevenness on the outer side of the thigh at about the union of the middle and lower third. December, 1877, twinging pain in the bone at the site of the irregularity which lead him to seek advice. Ointments, etc., were used without relief. At the outset the pains were moderate

and intermittent for a day at a time, but during January, 1878, they became more pronounced and continuous. What distressed him more than the dull, nagging pain, that now extended through the whole thigh, was a peculiar sensation of weakness in the leg, that finally, in March, compelled him to quit his work. Early in May, 1878, while quietly walking in his room he felt a cracking in the thigh and at the same time a sharp pain and unusual mobility, so that he cried out, "my leg is broken;" on attempting another step he fell. He thought the fracture to be at the old place. A plaster bandage was applied and the patient brought to the hospital. The injury was found to be at the site of the former fracture, where there was a moderate swelling, but otherwise no remarkable enlargement suggestive of a tumor; there was also no enlargement whatever of lymph glands; diagnosis of malignant growth was so excluded, both on account of this fact, and of the patient's general good health.

Early in September he was dismissed to his home with an ununited fracture, his condition otherwise being excellent; a firm splint was applied, and with crutches he was able to get about. The state of the thigh was as follows: mobility at site of fracture; a not extensive swelling at the middle third, with indistinct fluctuation; about a hand's breadth below trochanter, upon moderate pressure with the finger, was discovered a sort of crepitation.

About the middle of October, patient returned to the hospital, wishing for an operation, there having been no union of the fractured bone. Exsection naturally suggested itself as a remedy. Upon incision being made into the outer side of the thigh at its middle third, there escaped about a half pint of glairy, reddish gray fluid. This contained echinococcus cysts, of sizes varying up to that of a hazelnut, and in different states of preservation. Widening the opening, the fractured ends became visible, when the bone was found to be so extensively destroyed by the entozoa, that disarticulation at the hip joint was made necessary. Soon after the operation, patient complained of pressure in the stomach and difficulty of breathing. The latter symptom increased in severity, while general tympanitis appeared. In seven hours death ensued.

At the post-mortem, the liver was the only organ found diseased. Examination of the brain was not allowed.

Prof. Virchow reported upon the condition of the liver and thigh, as follows: The liver contained echinococcus cysts. The thigh bone was sawed through lengthwise; the soft parts were intact and the osseous part nowhere greatly swollen. The shaft was broken in two places; the upper fracture widely gaping; the other, a hand's breadth below, incomplete. A number of echinococcus cysts fell out during the operation. On opening the bone it was found to be occupied with echinococcus cysts, almost in its whole length; the trochanter, head, and condyles only were free. The shaft was wholly filled with cysts to such an extent that the medullary canal measured in places four cm. in diameter. This enlargement of the canal took place at the cost of the surrounding bone, which in many places was much thinned, and in some quite destroyed.

The nature of the cysts was peculiar. There was not, as usual, one great cyst, with its contained scolices, but a great number of small cysts, lying side by side, the largest of the size of a walnut, but the greater number not bigger than a cherry, or, indeed, a cherry stone. At the middle of the diaphysis, the cysts were entirely loose, but towards the extremities some were embedded in the spongiosa.—*Virchow's Archives*, Jan., 5, 1880.

SPLINTER OF WOOD CARRIED FORTY-SEVEN YEARS IN THE
EYE WITHOUT CAUSING INFLAMMATION.

BY DR. SIGISMUND WEIMAR.

Mr. G——, 59 years old, farmer, applied, 1879, for advice on account of inflammation and pain that for half a year had been present in his left eye. The connective tissue of the eye was much injected. Cornea, in its lower half, partially opaque; in the midst of this opacity a small sunken scar. The rest of the cornea was perfectly clear. Iris appeared like that of the unaffected eye; the pupil was of medium size, but failed to respond to atropine. Occupying the vertical diameter of the

pupil, was a yellowish body, about the size and shape of the point of a pen, the broader end being uppermost; the ends of this body touched the border of the pupil. The lens was absolutely opaque, and when viewed under lateral illumination, appeared black. The bulbus was somewhat hardened, and very painful upon pressure from above downwards. Movements of the eye also caused pain.

When twelve years of age, the patient, while climbing a tree, was wounded in the eye by a twig, causing blindness. As the wound gave rise to no further inconvenience, special medical aid was not sought. Not until the present year, 1879, did painful symptoms compel him to have the organ treated. He had been already in the hands of several physicians, but all their efforts had been fruitless; the pain continued uninterruptedly. The opaque pupillar object had been regarded as an exudation, but I decided otherwise, for the following reasons: The eye had been pierced by a twig; the scar which marked its entrance was still plainly to be seen. The object was too sharply outlined and too distinct from the surrounding tissues to be an exudation. The long continuance of the inflammation, the pain which was increased by pressure and motion, made it probable that a foreign body was present, and at the bottom of these phenomena.

Diagnosis.—Forty-seven years ago a splinter of wood penetrated the cornea, and remained imbedded within the eye, in a part poorly supplied with nerves, hence the absence of inflammatory symptoms, etc., in the subsequent years. When, in the course of time, the lens capsule atrophied, the ends of the foreign body came in contact with the iris, and set up ciliary irritation and inflammation.

Operation was advised and made. The lens was removed through a peripheral linear incision, and with it the foreign body, which was as thick as writing paper, five mm. in length, by two mm. at its broadest end. The lens was colored dark-red, by hematine. The result was as wished. After the healing of the cut, the bulbus was painless upon pressure and motion. Patient can distinguish the light, but whether he will have further power of vision in case the opaque vitreous should clear, remains a question.—*Berlin. Klin., Wochenschrift*, Feb. 2, 1880.

PECULIAR CASE OF URETERO-VAGINAL FISTULA.

BY M. DUPLAY, PARIS.

The diagnosis of uretero-vaginal fistula is based, according to the authorities, upon the following signs: 1. A probe introduced into the fistula, encounters a narrow canal. 2. Colored fluid injected into the bladder, will not escape through the fistula. 3. The patient experiences, from time to time, the need of emptying the bladder.

M. Duplay has just observed a case in which the first two signs were absent.

A woman suffered from a constant dribbling of urine from the vagina. Examining with the aid of the speculum, close to the cervix uteri a small opening was discovered, through which the urine escaped. A probe introduced into the opening seemed to enter the bladder, for its extremity moved freely as in a cavity. Milk injected into the bladder appeared at the fistula. The patient was able to retain the urine to some extent. M. Duplay diagnosed a vesico-vaginal fistula.

Several cauterizations with the hot iron and galvano-cautery, were made, but the urine still continued to pass by the fistulous opening. Five days after the last cauterization, peritonitis supervened, and the patient died.

Post-Mortem.—Pus in peritoneal cavity. A sound passed through the vaginal mouth of the fistula, entered a cavity which corresponded to a rupture of the ureter. The vesical mouth of the ureter was dilated, hence the possibility of the passage of fluids from the bladder into the vagina, through the fistula. It was evidently a case of uretero-vaginal fistula.—*Gazette Hebdomad.*, Feb. 13, 1880.

REPORTS ON PROGRESS.

MONTHLY REPORT ON THE PROGRESS OF THERAPEUTICS.

Hydrate of Chloral and Oxide of Zinc in Infantile Diarrhea.—JAMES TISOU praises highly the combined use of hydrate of chloral and oxide of zinc, in cases of intestinal irritation, infantile diarrhea, summer diarrhea in young infants. He administers chloral by injection and oxide of zinc by the mouth. At the same time a strict diet is prescribed. Here are his favorite prescriptions :

R. Chloral Hydrat.,	1 gm. 30	grs. xxiiss.
Starch water,	60 gm.	℥ij.

M. Sig. One, or one and a half coffeespoonfuls for a small injection, repeated twice or three times a day. On the other hand, he gives every five hours a coffeespoonful of the following mixture :

R. Zinci oxidi,	1 gm. 50.	grs. xxiiss.
Pulv. gum. acaciæ,	7 gm. 50.	grs. cxij.
Sach. alb.,	7 gm. 50.	grs. cxij.
Lactopeptine,	3 gm. 50.	grs. lii.
Aquæ canellæ,	32 gm.	℥j.

—*Le Progrès Médical*, Jan. 31, '80.

Oil of Peppermint for Burns and Scalds.—The *Allg. Hopfen-Zeitung* says that one of the best, though least known agents in the treatment of burns and scalds, is oil of peppermint. Applied by pencil or cloth to the wound, it gives prompt ease from pain and leads to a rapid cure without scars. This oil should always be kept on hand. Previous to its application the burnt part may be kept under water. It is sometimes advisable to dilute it one-half with glycerine. In this form it is an excellent application to frozen extremities.—*Allg. Wiener Zeitung*, No. 1, '80; *Cin'ti Lanc. and Clin.*, Feb. 14, '80.

Alkalies in Anemia.—W. NICHOLSON thinks that alkalies ought to take the place of iron in the treatment of anemia; that they improve the tone of the digestive system, increasing the appetite, aiding the liver to work, promoting the flow of bile, and clearing the blood and urine from lithates or other sediments and impurities, and that there is little doubt that they, more than any other remedy can restore the digestive tract to a state of health; while iron, instead of giving tone, is apt to disorder the digestive tract. He prescribes the bicarbonate of potash, in twelve to twenty grain doses, four times a day, for months continuously, if necessary, and has seen no depressing effects whatever. In order to cover the taste and make it less disagreeable to the patient, he combines with it spirits of chloroform. In anemia he finds the best results from potash, from the beginning to the end of the disease, and by it hopes to cure most of the cases he treats, unless due to tubercle, or secondary to some incurable lesion.—*Practitioner*, Jan., '80.

Antimony and Dover Powder's in Acute Bronchitis.—BOZZI uses with success, in acute bronchitis, the following formula:

R. Sulph. aurat. antimonii,	1 gram.	
Pulv. Doveri,	1	"
Pulv. sach. alb.	3	"

M. Div. in chart^l no. x., of which let one be taken every three hours, without taking it more than four times in twenty-four hours.

The same medication is very useful in the exacerbations of chronic bronchitis, as also in the bronchitis symptomatic of diseases of the heart and lungs. The diet should be limited to warm, sweetened milk and chicken broth. The temperature of the chamber of the patients should not be below 12° Reaumur, (59° F.).—*Le Progrès Médical*—*Paris Medical*.

Enema against Infantile Convulsions.—JULES SIMON, after evacuating the bowels with a large enema, either simple or oleaginous, administers the following:

R. Musk,	0 gm. 20	grs. iij.
Camphor,	1 gm.	grs. xv.
Chloral Hydrate,	0 gm. 30	grs. ivss.
Yolk of Egg,	No. 1.	No. 1.
Water,	150 gm.	3 ivss.

—*Ibid.*

Anti-diarrheic Potion.—M. DUJARDIN-BEAUMETZ recommends in his clinical teaching the following potion, as generally useful in diarrhea:

R. Vini opii,	10 gtt.
Bismuth subnit,	10 gm.
Aquæ menth.,	10 gm.
Eau de laitue,	70 gm.
Syr. rhatan.,	30 gm.

—*Le Progrès Médical*, Feb. 28, '80.

Aspidium Marginale, for Tænia.—MAISCH has used successfully the oleoresin of aspidium marginale in the treatment of tænia. It is diluted with an equal quantity of alcohol added to fifteen or twenty times its weight of sugar, and afterward enough water is added to form syrup. Given in this manner in divided doses, like oleoresin of male fern, it was well borne by the stomach.—*Am. Jour. Pharm.*, March, 1880.

Rosacea of the Face.—M. HILLAIRET, in *Annales de Dermatologie* recommends the following treatment for rosacea. Wash the face several times with very warm water, then—

R. Sulphuris sublimat.,	3j.
Tinct. camphoræ,	3ij—iv.
Etheris sulphurici,	3j.
Aquæ,	ad 3vij.

M. Sig. Bathe the face at night with this, and let it dry on. In the morning wash and apply—

R. Zinci oxidi,	3ss—j.
Unguent. petrolii.	3j.

M.

Improvement begins in a week, but the treatment should be continued several months.—*Med. and Surg. Rep.*, Jan. 3, '80.

A New Galactagogue.—ANDERSON, of Jamaica, has drawn attention to the marked efficacy of cotton-leaf as a galactagogue. The tea is made of infusion from the green leaves of one of the shrubs that produces the cotton of commerce. (The *gossypium barbadense*) is prepared like ordinary tea, and is not unpleasant to the taste, if mixed with milk and sugar. A concentrated preparation is prepared, called the liq. gossypii corticia, which may be had of Corbyn, Stacey and Co., London.—*Med. Times and Gazette*, Feb. 14, '80.

Salicylates in Diarrhea.—KILNER, in the St. Thomas' Hospital Reports, recommends the salicylates of bismuth and calcium in diarrheas dependent upon the heat of the weather.

"It seems not improbable, in these cases, that the diarrhea is an effort of nature to reduce the temperature of the body, the sweat glands being either incompetent or else not sufficiently active to perform the extra duty suddenly required of them. Here the salicylates not merely check the diarrhea, but also cool the body by their influence upon the sweat glands, assisted by the direct cooling action of the air upon the larger quantity of blood impelled through the cutaneous capillaries; and, in addition, the stimulation of the glands does not terminate with the leaving off of the medicine, thus enabling the child to become accustomed to hot weather."

In another class of cases, when the diarrhea is caused by improper food, the drug may be expected to be of use by arresting the decomposition or fermentation of substances in the alimentary canal; but when the intestinal derangement is secondary—being derived by reflex action from some other part, as occurs in the dentition of infants—no effect will be produced.

He advises the salts to be given in good-sized doses, two or three grains for a child under six months, and from three to five, or more, when above that age.—*Med. and Surg. Rep.*, Jan. 17, '80.

Quinidia Combination for Intermittents.—REED recommends the following formula in the treatment of intermittents:

R. Quinidiæ sulph.,	grs. xxx.
Oleo-resinæ capsici,	grs. iij.
Morphiæ sulph.,	gr. j.
Syrupi,	q. s.

M. Ft. pill., no. x. Sig. One every three hours.

He says that if a cholagogue cathartic be given at the start, and a full opiate (preferably a hypodermic injection of morphia) an hour before the expected paroxysm, this combination has been uniformly successful in his hands, even in most obstinate cases of intermittents.

In cases of malarial cachexia he finds that many recover under the influence of sea air, without any medication. When the latter is necessary he has seen excellent results from small doses of nux vomica combined with the sixteenth of a grain of podophyllin, or one-fourth of a grain of blue pill, and repeated every four or six hours.—*Med. and Surg. Rep.*, Jan. 10, '80.

Milk in Rheumatism.—BIOT, in the *Revue Mensuelle de Medicine et de Chirurgie*, says, "The fever of acute rheumatism generally lasts two or three weeks, and consequently, either from the time it lasts or on account of the high rise in temperature, causes an enormous consumption of blood corpuscles, which produces profound anemia in the patient. The fall of temperature is the best criterion of the cure, and coincides exactly and constantly with the disappearance of the pains. The tortures endured by patients suffering from acute articular rheumatism, are in themselves alone, of a violence and tenacity sufficient to induce the physician to endeavor to oppose to this disease a treatment which would unite the three qualities, *cito, tuto et jucunde*. The milk diet seems capable of fulfilling this desideratum; it causes the temperature to fall rapidly below hyperpyrexia, and simultaneously assuages the pains in a period varying from three to eight days. The effects from these two points of view, are more prompt and more powerful, if the patient be submitted to the milk regimen at the outset of the affection. This milk regimen, without overcharging the stomach or raising the temperature, by its nutritive power and its facility of digestion, prevents, in a great measure, that characteristic and generally troublesome anemia left behind by attacks of rheumatism.

Besides these general effects, milk diet has a special action on the urinary function, which is clearly indicated in rheumatism. Milk strongly favors the elimination of all the waste principles accumulated in the organism; its exclusive use causes both the quantity of urine excreted in twenty-four hours and the quantity of all the saline principles dissolved in this liquid to increase rapidly.—*Med. and Surg. Rep.*, Jan. 24. '80.

Inhalations of Indian Hemp in Tetanus.—LUCAS, from his experience in India, thinks highly of cannabis indica in tetanus, when used in the form of inhalation by means of pipe or cigarette. The drug is mixed, if thought desirable, with ordinary tobacco; and the moment the attendants notice the beginning of the spasmodic attacks, the patient is made to smoke until the spasms subside, which they soon do, and until he becomes drowsy and induced to sleep. Absolute quiet is then enjoined. This treatment should be kept up night and day; that is at the commencement of every attack. Each dose of the smoke should be regulated at from thirty to eighty grains; beginning with the smaller quantity and gradually increasing, as tolerance is acquired.—*Med. Times and Gazette*, Feb. 21, 1880.

Belladonna in Chronic Constipation.—DA COSTA suggests and recommends in the treatment of chronic constipation, whether occurring from want of tone in the bowels as a result of typhoid fever, or from chronic dyspepsia, the administration at night of a tablespoonful of sweet oil and three times daily one drop of the fluid extract of belladonna. He has found it efficient in cases which had been very refractory. He generally combines it with some bitter, such as compound tincture of gentian, tincture of cardamon, or infusion of gentian, but more often with compound tincture of cinchona. The belladonna tones up the non-striated fibres of the intestinal wall and enables them to contract more vigorously, and thus favors peristalsis. The oil aids at first by permeating and softening the hard fecal masses.—*Med. and Surg. Rep.*, Jan. 24, '80.

Night-sweats of Phthisis.—KÖHNHORN treats night-sweating of phthisis with a powder used by the military medical department, for sweating of the feet. Its composition is as follows: Salicylic acid, three parts; starch, ten parts; talc, eighty-seven parts. The whole body is powdered with this at evening, the mouth and nose being protected with the handkerchief. If the skin is quite dry, the body should be rubbed with fat bacon, or spirits and tannin, in order to make the powder adhere. Dr. Berkart, of the Victoria Park Hospital, says that he has found that the most efficacious and prompt means of treating night-sweats, consists in, after drying the surface, painting the whole trunk with a very strong solution of gum acacia. This dries in a few minutes, and the next morning the surface is washed with tepid water. A considerable reduction of temperature is produced.—*Berlin. Klin. Woch.*—*Med. Times and Gazette*, Feb. 7, 1880.

Chlorate of Sodium in Inflammations of the Skin and Mucous Membrane.—GREEN recommends chlorate of sodium in preference to the potash salt, in all inflammations of the mouth and fauces, whether idiopathic or symptomatic, administering a solution of twelve grams of the salt to a hundred and twenty-eight of the water. (three drachms to four ounces). He also uses it as a lotion, four grams to 500 c. c. of water, (one drachm to a pint), in scarlatina to the great comfort of the patient; and has found it more efficient than any other application in cases of inflammation produced by the poison of rhus toxicodendron.

He uses a solution of the strength of four, eight or twelve grams to 500 c.c. of water, (one, two or three drachms to the pint).

In erysipelas he employs it as a local application, using from two to four grams to 500 c.c., (one-half to one drachm to the pint of water).

In simple ulcers of the leg, in hemorrhoids, and inflammation about the anus, in inflammations of the meatus auditorius, of the nostrils and vagina, and the various inflammations of the scalp in children, several of which are classed together under the name of scald-head, he uses it with the happiest results.—*Med. and Surg. Rep.*, Jan. 17, '80.

Iodoform in Chronic Arthritis.—GUBLER employed ten parts of iodoform to twenty of sulphuric ether and twenty of alcohol. When dissolved, the liniment should be applied to the diseased joint by means of a pencil. The parts should then be covered with a piece of oiled silk. For the same affection, Dr. Cottle dissolves iodoform in chloroform.—*Med. and Surg. Rep.*, Feb. 14, '80.

Sympathetic Nervous Cough of Pregnancy.—TANNER recommends the following:

R. Spiirtus etheris,	3iij
Tinct. chloroformi comp.	3j
Acidi hydrocyanici diluti.	℥xv
Liquoris morphiæ sulphatis,	3i
Tinct. cardamomi comp.	3vj
Aquam,	ad 3viiij

A sixth part every 6 or 8 hours.

Or,

R. Tinct. valerianæ ammon.	℥xxx
Tinct. sumbulis,	℥xx
Tinct. belladonnæ,	℥x
Tinct. camph. comp.	℥xxx
Aquam camphoræ,	ad 3xij

For one dose. —*Therap. of Gynecol. and Obstet.* p. 223.

EDITORIAL.

VOL. III.

APRIL, 1880.

NO. 4.

INTRA-PLEURAL RÂLES.

During the past few years, Dr. James R. Leaming, of New York, has been advocating some novel views as to the mode of production and the seat of many physical signs present in diseases of the lungs. The sounds, which, since the time of Laennec, have been regarded and taught as intra-bronchial and intra-pulmonary, are referred by him to the pleura.

He believes the bronchi up to the third and fourth divisions, to be constantly filled with residual air, in which there can be no movement except by molecular motion. Nine-tenths of the whole volume of air contained within the lungs, he considers to be residual, the tidal or atmospheric air, which is taken in at each inspiration, composing the remaining tenth. The tidal air advances only to the fourth division of the bronchi, and here, mingling with the residual air by the law of the diffusion of gases, reaches the air vesicles. This theory destroys the idea of an active air-current within the smaller bronchial tubes; hence the sounds that we believe to be caused by such a current, must be otherwise explained.

The mucous, subcrepitant and crepitant râles are regarded by him as intra-pleural sounds, caused by a fibrinous exudation in the pleura.

In explaining the production of the normal vesicular murmur, he says, "It is composed of two elements, air friction of the tidal movement in the convective tubes, broncho-respiratory, and the dilatation of the true respiratory system, which contracts upon the residual air with susurrus.

When inspiration takes place in ordinary respiration in health, the residual air is increased, it has been estimated, one-tenth, which, dilating forcibly the contracting, true respiratory system, causes a vibrating murmur of low pitch, resembling the roar of the sea heard at a distance."

At a late meeting of the Kings' County Medical Society, the relation of these views to the signs of phthisis, were fully explained by their author. He says, "I believe that nine-tenths of all the cases of phthisis of any form, that have come under my observation have had an intra-pleural origin; that is, that the first discoverable signs of pathological changes were there located."

The primary cause of intra-pleural, pathological processes, is depressed vital power, as from mental irritation and worry, from prolonged anxiety, loss of friends, miscarriage of business, of hopes of any kind, overwork, bad air, bad food, and fever and ague poisons. When these conditions are present, a slight cold, or increased vital depression from any other cause, may result in pulmonary hyperemia, with plastic exudation upon the pleural surfaces, which, if the cause be not removed, may remain and become organized, forming pseudo-membranes and adhesions. The local disability from thickened pleura and adhesions, constantly contracting, invites new exudations from every new hyperemic cause of debility, until contracting bands shoot into and through the lung, and progressive fibroid phthisis is established, which may result in progressive destruction of the air-sacs, or the formation of cavities from caseous degeneration.

"Plastic exudation upon the pulmonary pleural surface, has the immediate effect of obstructing the capillary circulation in that part of the true respiratory system which subtends the deposit. If it is not quickly reabsorbed, it becomes organized, and contracts, causing still greater obstruction. Hemoptysis frequently results, it may be immediately, but in most cases not until after two or three weeks, or even longer.

"The reason of this is evident, if we consider the minute anatomy of the circulation of the true respiratory system. The nutrient arteries of the lungs are derived principally from the

bronchial, and differ from all others in the body, in the fact that they have no returning veins; no *venæ comites*. The nutrient capillaries after performing their special function, anastomose with the radicles of the pulmonary vein, and their blood is aerated even while performing its office, and hence, notwithstanding this apparent anomaly, arterial blood is alone forced into the left heart.

“Consequently obstruction to the nutrient capillaries, throws their blood back upon the bronchial arteries, which might seriously interfere with the circulation, except for a provision of nature, by which mucus is exuded copiously through the mucous membranes, (bronchorrhea), or perhaps blood (bronchorrhagia). So that either may be an important symptom of plastic exudation, and if carefully sought for, the plastic râles will be found.”

In substantiation of these views, Dr. Leaming cites several observations which were made on cows, condemned on account of pleuro-pneumonia; the animals were first thoroughly examined and afterwards a post-mortem was made. In regard to one, he says, “the right side was dull, under percussion, everywhere. There was bronchial breathing over the centre of the lung, but no râles, except over the shoulder and over the diaphragm. Post-mortem showed consolidated lung, except a portion of the depending part, which was edematous. The true respiratory system of this part was filled with glutinous fluid. There were adhesions at the summit of the lung and at the base, where the râles were heard, and there were none elsewhere.

“Over the left side there was a moist quality of the respiratory murmur. Listening attentively, an occasional soft, moist, distinct râle could be heard.

“The post-mortem showed the pleural surfaces bathed with their adhesive exudation, and occasionally Prof. Law could raise with the point of his knife radiating fibres of beginning organization.

“There was no pneumonitis, no pleuritis, and the hyperemia was relieved by the bleeding. More positive and direct evidence of the intra-pleural origin of râles, of the crepitant and

sub-crepitant varieties, as well as of the priority of interpleural processes could not be desired."

"The practical advantage of the early diagnosis of intra-pleural processes, which may lead to phthisis of either the tubercular or fibroid variety, is its perfect curability by simple management, systematic and gentle expansion, by filling the lungs moderately and then holding the breath, the expansive force of the inspired air becoming rarefied by heat in mixing with the residual air, being the efficient factor. Milk diet in large amount, so that the blood-vessels may be distended and nutrition carried to every part, with thorough and repeated applications of spirits of turpentine over the region of pathological signs, with removal of depressing conditions, will speedily cause to disappear all evidence of disease, which if left to the remedial efforts of nature might result in one of the forms of pulmonary phthisis."



A SPLINT FOR COMPRESSING AND SUPPORTING THE TESTICLE.

Of all the means at our disposal for treating disease of the testicle, none is of more importance than compression, thoroughly and evenly applied. The procedure usually resorted to, viz: strapping, is attended with certain inconveniences that neither skill nor care can overcome entirely. The scrotum will sometimes become so irritated, and, if the dressing be not carefully applied, inflamed, as to compel the surgeon to desist for a time. Again, the tumid organ will sometimes subside so rapidly after strapping, that the adhesive straps act no longer as a compress, but only as a support. In this event, the organ has either to be again disturbed for the application of a new dressing, or time is lost in the treatment. Indeed, it is a difficult matter to make the compression evenly over the whole organ, with straps. Any appliance, therefore, that will

enable the surgeon to support and compress the inflamed organ, to adjust the compression without removing the dressing, and that will not cause inflammation or irritation of the scrotal tissues, will be gladly given trial by the practicing surgeon.

For the purpose of meeting these indications, Dr. O. A. White,¹ of New York, has devised a splint of hardened rubber, shell-shaped, and very light, and moulded to receive and accommodate, within its cavity, the enlarged organ. About one-third of the upper portion of the shell is removed, the section being made in an oblique direction. In order to avoid a concentration of pressure on the cord, the upper part—that intended to pass behind the testicle—is smoothly everted. Down the front of the shell runs a cleft, to allow easy overlapping of the thin edges, and on either side of this are perforations, through which a string is laced, for the purpose of effecting the desired compression.

In applying the instrument, the affected testicle is fitted into a suitable sized shield, and a bandage cast around the upper part of the instrument, corresponding to the neck of the scrotal sac. This is for the purpose of preventing the testicle from retreating upward and outside of the cavity in which it has just been placed. Compression is now made by simply drawing on the lacing strings. If, during the absence of the surgeon, the dressing becomes too painful, the compression may be relaxed by the patient. The whole is fitted with a strap for suspension.

It is claimed that the use of the shield, in cases of varicocele and indolent sarcocele, and pending the necessary treatment of neuralgia of the testes, has been highly satisfactory.

1. *Boston Medical and Surgical Journal*, January 29, 1880.

PASTEUR'S INVESTIGATIONS OF THE CAUSE OF THE "CHOLERA" IN FOWLS.

At the sitting of the Paris Academy of Medicine, Feb. 10, as reported in the *Archiv. Gen. de Medicine*, M. Pasteur made a very interesting communication upon the nature of "hen cholera," a disease only too familiar in the poultry yard. The affected fowl is without energy, totters; its wings drop; it is overcome with a heavy somnolence; frequently death takes place very quickly. The disease is produced by a microscopic organism, first discovered by M. Moritz, then rediscovered in 1879, by M. Toussaint, who has reproduced it by cultivation.

Chicken broth, neutralized with potash, is the best medium for the cultivation of the microbion, which will not develop, but perishes quickly in a solution of yeast, while the bacteria of charbon flourishes in it.

Another peculiarity of the microbion is, that it is relatively innocuous for the guinea-pig. If this animal be inoculated with the injected liquid, a local abscess appears, but otherwise its health seems not to suffer. But if the same liquid be inoculated in the fowl, speedy death is the result. A few drops mingled with the food, will develop in the fowl's alimentary canal, myriads of the microbia, which appear in the excrements, and which destroy those individuals inoculated with them.

The virulence of the liquid obtained, in successive cultivations, is not diminished; the inoculation of a minute part of a drop, will with great certainty cause death, within two or three days, more often within twenty-four hours.

By changing the method of culture, the virulence of the infectious microbion can be diminished. This diminution is betrayed by the retardation in the development of the microbion, but its essential nature remains unchanged. Inoculated with the most virulent microbia, the fowl most certainly dies; with the less virulent, sickness is produced, but not death.

The fowl, in the latter case, after recovery, is no longer susceptible to fresh inoculation, which is the very interesting and important discovery made by M. Pasteur. The analogy between the activity in the organism of this microscopic body, and of the vaccine virus, is obvious. The enfeebled microbion is to the virulent, as vaccinia is to variola. It remains to be learned if we can cultivate and reproduce this weakened microbion, as we reproduce vaccine matter from arm to arm, independent of the original source, the cow-pox. These researches suggest two thoughts: We may hope to succeed in cultivating, artificially, all the different kinds of virus; we may hope to discover the vaccinal virus of virulent maladies.

NITROUS OXIDE GAS IN MELANCHOLIA AND MENTAL EXHAUSTION.

Several years ago the attention of Dr. J. E. Blake was called to the use of nitrous oxide in nervous diseases of asthenic type, by a report of the remarkable effect of an admixture of this gas with air, as it had been observed by a dentist and reported by him to Mr. Johnston, a well-known manufacturer of dental instruments. Dr. Blake and Dr. A. McLane Hamilton have been conducting a series of careful experiments, of the result of which they publish a preliminary report in the *Medical Record*, of January 31.

They have found advantage from this administration of mixed air and nitrous oxide, in cases which have been denominated "spinal irritation," and in those of "nervous prostration" in women who have no discoverable uterine disease, as also in hysteria or nervous derangement bordering on melancholia. "When the circulation is defective, and when there is lividity of the hands, constipation, slow pulse and rough, scurvy. mud-colored skin, it, in a short time, greatly betters the condition of the patient."

Under the name of "compound oxygen" or "liquid oxygen," it has been used in its liquid form by quacks, and has been sold as a patent medicine; and has cured some who had experienced no relief from treatment ordinarily adopted for such cases.

The gas is to be well diluted with air, which is readily effected by opening the valve near the mouth in the apparatus used for administration. The immediate effect of the inhalation is a pleasant, exhilarating stimulation; and no further effect should be produced, for pushing it to the extent of intoxication or anæsthesia is a disadvantage rather than an advantage. They suggest its use in the treatment of alcoholism, especially in the early stages of delirium tremens, as it virtually takes the place of alcoholic stimulation without the subsequent depression. They have found it of special service in cases of insomnia, when administered *not* just before bedtime, but in the morning or middle of the day. In such cases it generally procures refreshing sleep, even for those who have relied habitually upon anodynes.

The reports which they have given are of such an encouraging character that we shall watch with interest for further results. They are now making experiments in its use with the chronic insane, and promise an account of their observations at some future time.

BANQUET TO PROFESSOR BROCA.

In the *Gaz. Hebdom.*, Feb. 27, '80, appears a report of the banquet given to Professor Broca, in honor of his election to the French Senate. While the occasion was apparently one of a purely political nature, it was made rather one of mutual congratulation among the scientists generally, since it was to the scientific labors of Professor Broca that his election was largely due. To quote from the response of the Professor made to the greeting of his friends, "They have chosen a man

of science, because they hold science in high estimation, because they consider that to serve science is to serve one's country also." The labors of Broca in the department of anthropology, he having founded the Paris Society, first attracted public attention which ended in his election as "one entirely devoted to republican institutions." May all republics learn to honor science as the true upholder of republican principles, which are based upon the profoundest researches of the human mind and established as the laws of nature and of God! America, in the rawness of her civilization, in the crazing rush after material wealth in practice, has yet to admit that science is the basis of substantial national prosperity, and the true guardian of republican institutions.

CORRESPONDENCE.

EDITORIAL LETTER.

NEW YORK, MARCH 1, 1880.

Bros. Editors:—To seize the chief points of medical interest in this metropolis so teeming with matters of instruction and intellectual entertainment, is no small affair. As to the men of note, they are most generous in their courtesy, and seem not only willing, but anxious to afford visitors who exhibit any interest in observation, every opportunity to gratify their desires.

One is impressed at the outset with the indefatigable industry of the leading and rising members of the profession. Every hour seems to have its appointed duty, with which nothing is permitted to interfere. In a city covering such an immense area, with the multitudinous engagements that occupy the working hours of the busy practitioner and teacher, punctuality ceases to be a virtue, it is a necessity. For example, at a clinical lecture of Professor T. G. Thomas, the lecturer announced,

that, upon the following Saturday he would operate upon three cases of ovarian tumor. The number of witnesses to each operation is limited to fifteen. He called off the proper number of names for each of the three operations which were to be done at the Woman's Hospital, the first at three o'clock, the second at half past three, the third at four o'clock p. m. I was fortunate enough to witness the second and third, and they were each commenced exactly at the time appointed; and so in every engagement which I had while in the city—exact punctuality—consequently no loss of time.

Six o'clock in the morning is the hour at which many of the busy great men start upon their daily visits, seeing many patients before their office hours commence.

The size, variety and system of their libraries proves their literary industry, of which we have so frequently evidence, in their many writings which reach us through the valuable periodicals as well as in more extended form. The discussions in societies, which are numerous and well attended, bear further testimony to untiring study and familiarity with whatever has been written upon matters pertaining in any degree to the departments in which they may be especially interested.

The New York Academy of Medicine, of which Prof. Fordyce Barker is now presiding officer, held a meeting which I attended. The elegant audience rooms were nearly full, more than a hundred members being present. Two papers of great interest were read. One, upon "the Night Medical Service of Paris," by Dr. Henri Nachtel, gave succinctly and clearly an account of the method and great benefit of this admirable system of affording prompt and efficient medical and surgical aid during the hours of the night. This is already bearing fruit in New York, and will doubtless be adopted in all the large cities of the world. The second paper by Dr. T. G. Thomas, was one upon which the author had bestowed a great deal of time and thought, the subject being "The Female Perineum, its anatomy, physiology and pathology."

This was illustrated by large colored diagrams, and elicited discussion by several well-known and esteemed authorities in the department of gynecology.

In most of the hospitals, and in the private practice of many, the principles of antiseptic treatment are thoroughly carried out; and so far as the opinion of your correspondent is worth

anything, the results of the careful attention to this method fully justify the treatment, and compensate for all the trouble in observance of its minutest details, without which the full benefit cannot be attained. Even in the charity wards of the New York Emergency Lying-in Hospital antiseptics is carried as far as practicable, and with most excellent results.

Batteyism, or "spaying" as Dr. Goodell calls it, is just now on the crest of professional favor; and with the present enthusiasm, will soon prove its proper place among the heroic remedial measures. Dr. M. Pallen, our former townsman, had recourse to this operation for the relief of a persistent catalepsy, following an attack of acute mania. The condition had, when I saw the case, endured for more than two months; within forty-eight hours after the removal of the small cystic ovaries, the catalepsy had completely disappeared. Unfortunately the woman died of peritonitis, four days afterwards.

In addition to the exhaustive system of public charities, New York enjoys the benefit of many large bequests and donations, which have been the means of erecting monuments of the noblest character to the memory of men, who felt that in amassing wealth they had incurred a debt to the community. Among the most magnificent of these is the New York Hospital, with its elegant library and museum of pathology, including very many carefully preserved and most valuable specimens.

Here is exhibited the scalp, with its valuable wealth of luxuriant hair, which was torn by machinery from the head of a young woman, about two years ago. In the ward I saw the woman, on whose head the wound is not yet completely cicatrized. She may have a natural wig of her own hair, when she is finally discharged.

Of course I visited the Woman's Hospital, elegant and complete in all its appointments, within whose walls have been won so many triumphs of surgery, for relief of the best part of humanity, where from day to day, work of inestimable value is performed, every part of which, like the spacious building in which it is done, bears noble testimony to the genius and energy of Marion Sims, who originated the work and the house. His successors are men of skill and ability, who are here making for themselves reputations that are deservedly world-wide.

The Library of the New York Academy of Medicine, has a

history that should encourage our Medico-Chirurgical Society. Only a few years ago, the volumes of this society numbered barely five hundred. They have now more than 13,000 bound volumes, and their tables contain all the valuable periodical medical literature of the world, including the "ST. LOUIS COURIER." Donations and bequests have been the chief source of increase, with one purchase of about 3,000 volumes from a Journal Association. May we not hope to approach its success? The only essential matters, in building up a library that shall be a benefit and a credit, are, generosity, thoughtfulness of the fact that such a work is being attempted, and a proper regard for those who will follow us, which should instigate us to endeavor, so far as we are able, to supply for them in some measure, the wants that we have, at times, each so keenly felt. A library of reference is a well-spring of joy to the searcher after knowledge.

The Obstetrical Society is a vigorous working body of the most prominent men in obstetrics and gynecology. The meetings are held at the residences of the members, and the dryness, as well as asperity of discussion are tempered by a collation, which also seemed to be the rule after the meetings of the Academy.

At this meeting, Dr. Skene, of Brooklyn, exhibited a new needle holder, which seemed to be a very excellent improvement to this useful implement. It has three grooves at differing angles, and a flange to prevent backward slipping. The reverse end is a pair of short jaws, faced with soft copper, for the purpose of firmly seizing without injuring the point of the needle, when used to draw it through the stitch.

M.

COMMUNICATION.

A NEW FORM OF SPLINT.

Messrs. Editors:—I desire, through the columns of the *COURIER*, to call the attention of the profession, to a new and economical method of treating fractures of the leg.

Dr. J. W. Crowley, of Salina, Kansas, its author, has treated fractures of the tibia and fibula, for several years by this method, meeting with uniform success.

The doctor, after bandaging the leg carefully with the plain muslin roll, rebandages the roll with greased or oiled muslin. He then takes a board of white pine, one inch in thickness, and four inches wider than the foot is long, and extending from the knee, two inches beyond the foot. He then places the bandaged leg on the board, and with a lead pencil traces, or outlines the fractured limb; and removing the board from under the patient's leg, drives into the board, just outside of the lead-pencil line, shingle nails, about two inches apart. He now takes plaster of Paris, rather thick, and lays it around and along the outlines and nails, making thus a dam or embankment, the shape of the leg, exceeding the patient's by one-fourth of an inch in width.

Having more plaster of Paris prepared, of the thickness of cream, he suspends the patient's leg about one-half inch from the board, within the embankment, and pouring in the plaster, it flows under and around the fractured limb, covering the leg just sufficiently to permit its removal for redressing. Thus you have a rest, a perfect splint, or half mould of the leg, which recommends itself as a mechanical appliance.

1. It is not irksome or painful to the patient; the weight of the limb being equally distributed.

2. The patient can assume, conveniently, three positions in bed: the sitting or upright position, and can lie on his back or side.

3. He can get out of bed readily, seating himself in an arm chair, resting his leg on another chair; and in a few days, if there is no pain or swelling, can move about his room with impunity.

4. It is not necessary to dress the leg so often, as this would not only serve as a splint, but prevents the soiling of bandages, for, after the plaster has set, the leg is bandaged as usual, omitting the oiled bandage, which was added simply to prevent the plaster from adhering to the limb.

In cases of compound fractures, a vent on either or both sides of the mould, can be made, to facilitate the easy escape of the water used in washing or dressing the leg.

Where there is much inflammation, pain or swelling, Dr. Crowley controls or subdues the same by simply applying wet cloths, and insisting upon some one continually fanning the limb, should the patient be unable to do so himself.

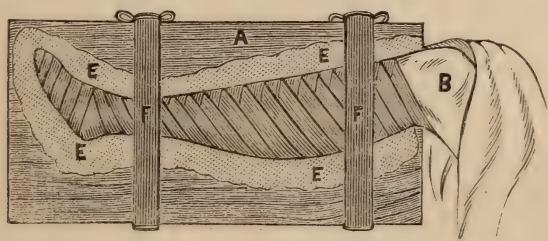


FIG. 1.—A. Plain pine board; B. Fractured leg bandaged; E. Plaster mould, lower edge much higher than the upper, so as to support the leg when the board is on its edge; F. Bandage holding the leg in position when the board is on its edge.

The above is respectfully submitted for the benefit of your many subscribers.

Respectfully,

S. B. MERKEL, M. D.

Salina, Kas.

BOOK REVIEWS AND NOTICES.

THE LAWS OF THERAPEUTICS; or the Science and Art of Medicine. By JAMES KIDD, M. D. Philadelphia: Lindsay & Blakiston. 1879; pp. 196.

It will be remembered that the above named author was summoned to the Earl of Beaconsfield to attend him in his illness at Berlin, during the late conference held there, and that the Homeopaths of London were elated in consequence. It will also be remembered that there was a spirited controversy at the time, during which the *London Lancet* made the statement that Dr. Kidd was not a follower of Hahnemann.

An examination of the work proves conclusively that it is the intention of the author to give prominence to Homeopathy. While he does not administer infinitesimal doses, he says there is a law of "*similia similibus*" and admits that there is also a law of "*contraria contrariis*." He says the beneficial results obtained from the administration of large doses of potassium bromide, frequently repeated, in epilepsy, is in accordance with the law of "*contraria contrariis*." He also refers to the use of physostigma, the opposite of strychnia, in large doses frequently repeated for tetanus, as evidencing the existence of the same law.

Under the head of "Hahnemann's law of similars" he mentions a case in which there were frequently recurring attacks of painful spasm of the gall-ducts, caused by the passing of inspissated bile and of gall-stones, which he cured by the use of the natural remedy, inspissated ox-gall, in ten grain doses, after she had been attended for some six years by many eminent London physicians. He claims to have been led to the conclusion that the ox-gall was the remedy indicated, by reflecting on the peculiar condition of the bile and the gall-ducts. Perhaps, if he had administered some of the gall-stones in this case, the result would have been the same.

After alluding to the fact that the abstraction of blood will arrest hemorrhage, he mentions a case of a lady who had had frequent miscarriages but no living child, and who came to him

complaining of pain in the iliac region and frequent gushings of blood from the uterus, both of which he entirely and permanently relieved by a single application of four leeches over the right ovarian region.

In both instances, he cites but a single isolated case to prove the correctness of his treatment. He refers to no general directions, dietetic or hygienic, which, of course, he could not have ignored, but would have the reader believe that these single isolated cases, which might have terminated as they did without treatment, are quite sufficient to prove his theory, show his great acumen, and establish a rule.

In order to further establish the law of similars, he alludes to the well known fact that alkalies will increase the acidity of the gastric juice, and acids will diminish it when taken before meals. In making this statement, however, he does not make use of his knowledge of physiology and explain that this action is simply in obedience to the law of osmosis. When an animal membrane has an alkaline fluid on one side and an acid on the other, the flow from one side to the other will be much more rapid and greater in quantity than when both are acid, or one neutral and the other acid.

He mentions a patient who had suffered with obstinate constipation for fifteen days and to whom had been administered without avail, purgatives and injections as well as the application of galvanism. He, however, being called in, administered *one grain* of the acetate of lead in a tablespoonful of water; in eight hours thereafter the patient had free evacuations from the bowels.

Had the doctor stopped to reflect upon the wonderful purgative action of the acetate of lead, he would have wondered how the workers in lead, who are habitually constipated, could escape having diarrhea.

He speaks of a patient who had suffered for five months from uric acid gravel, during which time alkalies had been administered without benefit, and morphia to relieve pain. On this patient's applying to him, he administered ten drops of dilute nitric acid in half a glass of water, four times a day, which afforded immediate and permanent relief. He says, "the pale acid urine, full of crystals, having been touched by the magic alchemy of its analogue was broken up and made innocuous." He does not here explain, as in a former place, that the adminis-

tration of an acid will diminish the amount of acid gastric fluid. He gives no history of the above case, further than the statement made regarding the urine. The probabilities are, that the uric acid gravel was a result of imperfect digestion and faulty assimilation, and the result obtained by the administration of the nitric acid was due simply to the fact that it promoted digestion. The administration of any substance that will promote digestion and correct faulty assimilation, whether it be pepsin, bismuth, strychnine or an acid, will always diminish an excess of phosphates, urates, uric acid, and of oxalate of lime when due to derangement of the digestive organs.

“Contraria Contrariis.”

As an illustration of the law of “*contraria contrariis*,” he mentions the following case :

“A gentleman, at forty-two, suffered for three months from a severe ulcerated throat, secondary to an indurated chancre. He was treated by Mr. Guy, and the late Sir Benjamin Brodie, by means of mercurial fumigations to the throat, and moderate doses of mercury internally. Suffering terrible pain in the throat, week after week, without relief, he discontinued their mercurial treatment and sent for me. I prescribed five grains of iodide of potassium, three times a day. The relief of the pain was immediate, and the ulceration was rapidly healed.”

Does this case illustrate the law of “*contraria contrariis*?” May not the relief afforded and the cure produced have been due, not to the potassium iodide directly, but to the mercury which had been deposited in the system, and which was rendered soluble and liberated, and thus made active through the medium of the potassium salt? It is a well-known fact that the administration of a potassium salt, after a course of mercury not unfrequently results in ptyalism, in consequence of liberating, and thus making active, mercury previously administered.

In nearly every instance, the author gives but a single case by which he would establish a law or prove a rule. In modern times, medical men are skeptical and ask for repeated proofs, before they accept statements. The evidence, furthermore, must be overwhelming, and beyond the shadow of a doubt. The reports of cases must be complete and in detail. Reports of the successful treatment of isolated cases are almost worthless.

Dr. Kidd seems to be wedded to two theories; those of "*contraria contrariis*," and "*similia similibus*," principally, however, to the latter theory. He attempts to explain the action of every remedy, on those theories, instead of basing their action on simple physiological grounds. Perhaps I should have said that he is wedded to the theory of "*similia similibus*," and admits the existence of a law of "*contraria contrariis*," in certain instances, because he sees no possible way to escape it.

So wedded is he to his pet theory, that he even applied Faradic electricity, to a patient who suffered from "A number of separate pains, as a distinct aching in many points all over the back, shoulders and sides," because, the peculiar pain its application produced, was the nearest analogue he could think of.

It would appear that he referred the beneficial action of the electric current, simply to the peculiar pain its application caused, and not to any effect it may have produced upon the circulatory or nervous system. I think that it will be generally conceded that the idea of applying electricity to a patient suffering with pain, simply because the pain appears to be similar in character to that produced by the application of electricity, for no other reason, is something new in galvano-therapeutics.

It appears evident that the author, although learned on most subjects relating to medicine, has "gone wrong" on therapeutics. He seems to be so imbued with the theory of "*similia similibus*," that he attempts to make the application of nearly every remedy conform to it, and shuts his eyes to every solution that points in any other direction.

I will not close my criticism without giving the author credit for uttering many truths. No one can doubt the truth of much he has said under the head of "Ars Medica," "Hydropathy," "Counter Irritation," "Food," "Physiology," "Pathology," etc.; and had it not been for his peculiar bias, he might have written a creditable chapter on "Therapeutics."

J. P. KINGSLEY, M. D.

TRANSACTIONS OF THE TENTH ANNUAL SESSION OF THE MEDICAL SOCIETY OF VIRGINIA, 1879; pp. 152.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF TENNESSEE, AT ITS FORTY-SIXTH ANNUAL MEETING, 1879; pp. 213.

PROCEEDINGS OF THE CONNECTICUT MEDICAL SOCIETY, 1879. Eighty-Eighth Annual Convention; pp. 214.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA. Thirty-Second Session, 1879; pp. 329.

TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION. VOL. XXX. 1879; pp. 1028.

In these different volumes of transactions of the State and National Medical Associations, there are, as usual, several papers of great interest and value. There are others of very little interest or merit.

One of the most interesting papers in the Virginia Transactions, is the "Report on Advances in Hygiene and Public Health," by S. K. Jackson, M. D., of Norfolk. In the epidemic of yellow fever of the preceding year, he found a suggestive subject for consideration.

The paper of H. P. C. Wilson, M. D., of Baltimore, Md., on "Paquelin's Thermo-cautery," etc., has been published in some of the medical journals.

The paper of A. M. Fauntleroy, M. D., upon "Diphtheria," is a valuable contribution upon the history of that disease, embodying observations upon thirty-three consecutive cases, occurring under one roof, in the Virginia Deaf, Dumb and Blind Asylum.

In the Tennessee Transactions, considerable space is devoted to papers upon "Yellow Fever," over twenty pages being filled with notes on the temperature and pulse of 143 patients, at different hours of the days during which they were under treatment, by G. B. Thornton, M. D., of Memphis. Brief papers on the "Introduction and Dissemination by Persons," on "Atmospheric Dissemination with Methods of Disinfection used at Chattanooga," and on "Topographic, Telluric, Atmospheric and Other Influences," are furnished by Drs. Hope, Baxter and Wight, of Chattanooga.

In a paper upon the "Etiology of Malarial Diseases," J. W. Penn, M. D., discards the germ theory, and "disbelieves in the existence of malaria;" but considers that "the remote cause of malarial diseases is enervation from privation of electricity, caused by the evaporation of *pure water*." * * * "The result is preternatural engorgement of the latter, [eliminative

organs] especially the liver, spleen and kidneys, with distension of their capillary vessels, to an extent which renders their physiological action an impossibility.

The address on "The Uses and Abuses of Alcohol," by T. A. Atchison, M. D., is an interesting and valuable contribution. The speaker took a decided stand in opposition to the use of alcoholic stimulants in any other way than as a medicine, and then only in the same way, and under the same precautions as are other *poisons*. "Of all the follies, fancies and fashions which have swayed the medical world, since the days of Hippocrates, none has been fraught with so much power of evil, as the 'food theory' of alcoholic stimulants."

In the Connecticut Proceedings, a large part of the space is occupied by the "Report of the Committee on Matters of Professional Interest." In this are included reports, more or less detailed, in regard to diphtheria, in different counties of the state.

An interesting case is reported, where, in a gentleman, aged sixty-seven years, the pulse beat at the rate of 144 per minute, during several successive months, and then returned to the normal rate of seventy to eighty per minute. Careful investigation failed to afford any explanation of the abnormal rapidity of the pulse.

Three essays are published, "Yellow Fever," by N. Mayer, M. D., Hartford; "Alcohol as a Therapeutic Agent," by R. S. Goodwin, M. D., Thomaston; "The Insane Colony at Gheel," by A. M. Shew, M. D.

In Alabama, the State Medical Association is the State Board of Health, and the county societies subordinate local boards. On this account a large part of the space in the Transactions is occupied with detailed reports of State and National legislation upon Sanitary Matters, the report upon the work of the Yellow Fever Commission, etc., etc. In the "Appendix of Medical and Sanitary Dissertations and Reports," are papers on "Recent Advances in our Knowledge of Kidney Diseases," by W. D. Bizzell, M. D., Mobile; "Hydrophobia," by J. M. Godfrey, Sumterville, Ala.; "Artificial Respiration, and the Care of New-born Babies," by E. D. McDaniel, M. D., Camden; "Costiveness and Constipation," by Thos. A. Means, M. D., Montgomery; "Hot Water Injections in Post-partum Hemorrhages," by M. H. Jordan, M. D.,

Birmingham; "Carbonate of Ammonia in the Suffocating Stages of Pulmonary Diseases," by Benj. H. Riggs, Selma; "Singular Effects of Tincture of Iodine," by T. C. Osborn, Greensboro; "Mechanical Injuries to the Eye," by Samuel D. Seelye, Montgomery; and a "Record of Ten Cesarean Operations in the State of Alabama," by Robt. P. Harris, M. D., Philadelphia, Penn.

The Transactions of the American Medical Association is a volume of over 1000 pages, and contains many papers, some of which are illustrated with excellent wood cuts. There is a deal of material in this, as in every similar volume of the American Medical Association's Proceedings, which is of real value, and which ought to be known more widely to the profession than it every can be when buried among so much other matter which is comparatively worthless. It would be well, if the volumes could be reduced in size by the exclusion of the comparatively less valuable material, and more general circulation given to that which is of real importance. Then, too, we think that such bodies as the American Medical Association and the State Associations might with propriety and advantage to the profession, express their dissent from, or approval of the views advanced by authors of papers, which are deemed worthy of publication. This, of itself, would be a stimulus to greater care and consideration on the part of those who write; and would greatly increase the value of the Association, as a means of expressing the matured judgment of medical men upon questions discussed at the meetings.

In this way, the American Medical Association would take a long step toward a position alongside of the best European Societies.

CLINICAL LECTURES ON THE DISEASES OF WOMEN, delivered in Saint Bartholomew's Hospital, by J. MATTHEWS DUNCAN, M. D., LL.D., F. R. S. E., etc. Philadelphia: Henry C. Lea. 1880; pp. 175.

The above entitled little book embraces nineteen lectures upon some of the most important diseases of women. As is stated in the preface, these have all been published in medical journals and are here collected in convenient form, for which we have to thank the publishers who have done the profession a service.

The clinical character of the lectures makes them often brief,

but also lends point to the style which is excellently adapted to the purpose of the teacher.

In the first lecture on "Missed Abortion," in urging the value of extensive knowledge, he gives the key to accuracy of diagnosis: "if you do not know of a thing, you are quite sure not to suspect it; and in all cases of difficult diagnosis, if you do not suspect a thing you are almost certain not to find it."

He condemns the use of perchloride of iron as an intra-uterine injection, as unsafe and unnecessary. In this we think he confirms the views of the majority of experimenters. If the iron styptic be desired, it may be much more safely applied by the swab through a speculum, as suggested by Dr. Engelmann, but even this will be rarely required.

The second lecture contains much valuable instruction in regard to the abnormal pelvis, the mode and importance of ready measurements, and method of selection as to modes of treatment.

Under the head of "Chronic Catarrh of the Cervix Uteri," our author, perhaps, includes conditions, which we now know to result from cervical lacerations, to which he does not refer; he does not seem to appreciate the value of Dr. Emmet's discovery or mode of treatment, and his directions for treatment are certainly not such as we would now indorse, nor are they such as seem to have encouraged the lecturer, who says, "if after two or three trials, which may each extend over several weeks, you fail to effect a cure, you had much better give up further meddling in the matter. You do no good to the disease or to the patient; you may, indeed, by frequent and prolonged irritation, produce a tendency to cancer." And thus he would condemn the sufferer to continuance of the evil.

"Hepatic Disease in Gynecology and Obstetrics," forms one of the most interesting lectures, bringing into suggestive relationship and contrast hepatic and renal pathology.

Not the least valuable matter is the frequent and well described histories of cases which aptly illustrate the elements of differentiation in difficult diagnoses.

While we may find matter to object to, and causes for difference of opinion, we can cordially recommend the work as containing much of value, and the opinions well expressed of an author justly held in high esteem at home and abroad.

SKIN DISEASES, Including their Definition, Symptoms, Diagnosis, Prognosis, Morbid Anatomy and Treatment. A Manual for Students and Practitioners. By MALCOLM MORRIS, Joint Lecturer on Dermatology at St. Mary's Hospital, etc. With Illustrations. *Philadelphia: Henry C. Lea.* 1880. 12mo; pp. 320. (Through St. Louis Book and News Co.)

This little volume of Mr. Morris' is one of the few of its class that is not amenable to the criticism of falling below its pretensions; indeed, we cannot but regret that one who writes so well should not have written more.

The section devoted to the "Anatomy and Physiology of the Skin," is very clearly written, and the illustrative wood-cuts are of unusual merit. After a very good description of the "Morbid Anatomy of the Skin," he expresses the very sensible conclusion, that, for purposes of diagnosis, the so-called primary lesions are, according to their definitions, entirely useless: First, because they may be caused by totally distinct conditions: and, secondly, they may change, as the process which gives rise to them becomes modified. It seems that our author was unable to resist that unfailing temptation to the dermatologist, a new classification. However, Mr. Morris has not gone very far astray, having, in the main, adhered to the arrangement of Hebra, with such additions as were required by the present status of the subject. Although systems of classification still differ very materially in many respects, each writer approaching the task from different points of view, it is a matter of much satisfaction to note the uniformity of nomenclature now prevailing, at least among modern English, German and American writers. For this, as well as many other things, dermatology has to thank Hebra and the Vienna School.

We were at first disposed to question the propriety of including, in a work on cutaneous medicine, such general diseases as scarlatina, measles, variola, typhus, typhoid and other affections, accompanied by more or less rash; but, as the author has introduced them mainly in reference to their skin lesions, and especially for the purpose of differential diagnosis, the idea seems to be a good one, although questions of treatment could have been omitted with advantage. The same argument, however, cannot possibly hold good of diphtheria, which we find discussed at considerable length.

We are sorry to observe that such unscientific terms as

syphilitic psoriasis and syphilitic acne are employed in the otherwise good, but brief, account of the syphilides.

Under the "Papular Group," we find described various forms of lichen. The lichen simplex of the author seems to correspond with our "prickly heat," the miliaria papulosa of other writers, of which he gives no account. Mr. Morris gives lichen psoriasis, (Hutchinson), as one of the synonyms for the lichen planus and rubra of Wilson and Hebra. Such a term is very objectionable, as remarked a few lines above; but it would seem that Mr. Hutchinson is peculiarly unhappy in his nomenclature. We believe the author to be in error in associating prurigo mitis with the true prurigo of Hebra, especially in view of the strenuous efforts made by recent writers, to dissociate certain pruritic states of the skin, from the latter well defined affection. From our own experience, at least, we should regard the prurigo mitis here described, as totally distinct from the primarily papular disease of that name, and that it therefore should have been relegated to other divisions of the work. Of the condition called relapsing prurigo, we have no experience.

The space at our command forbids a further criticism of the different diseases described, except to say that Mr. Morris has been fully alive to all the recent advances in the pathology and treatment of skin affections.

The general character and method of the book, however, require more than a passing comment. This is emphatically a learner's book; for we can safely say, so far as our judgment goes, that in the whole range of medical literature, of a like scope, there is no book, which for clearness of expression and methodical arrangement, is better calculated to promote a rational conception of dermatology, a branch confessedly difficult and perplexing to the beginner. Of especial value are the numerous tables, arranged in parallel columns, giving at a glance the differential diagnosis of diseases clearly resembling each other. The attention paid to the morbid anatomy, is a noticeable and useful feature. The rules for treatment, are, in the main, judicious, although from the size of the book, somewhat limited as to detail. We are very glad to note the absence of "selected formulæ." The book is well presented, being printed with clear type, on good paper.

THE HYPODERMIC INJECTION OF MORPHIA, Its History, Advantages and Dangers (Based on the Experience of 360 Physicians). By H. H. KANE, M. D., NEW YORK. *Chas. L. Bermingham & Co., Medical Publishers*, 1880; pp. 354.

In this little volume Dr. Kane has collated some valuable statistics in regard to the hypodermic use of morphia. Most of that which has been written upon this subject heretofore, has been devoted specially to the advantages of this mode of medication; comparatively little has been said or written as to the dangers.

Dr. Kane publishes thirty-six cases where death is said to have been caused directly or indirectly by this means; and a number of cases where more or less protracted syncope took place, though the patients recovered. In the chapter on syncope, he calls attention to a simple device in the form of a simple light strap with a patent buckle that will catch at any point. He advises the application of this tourniquet whenever a hypodermic injection is to be administered, in order that, in case the morphia solution should be thrown into a vein instead of the cellular tissue, the circulation, and so the absorption of the drug may be arrested by tightening the strap. He says, "I am firmly convinced that no physician should be held free from blame in case of accident, where he has not had a ligature or tape loosely encircling the arm above the point of puncture. At the first intimation of danger this should be pulled tight and kept so for several hours, being loosened gradually, thus permitting but a gradual entrance of the drug into the general circulation. With this precaution it will seldom be necessary to treat such alarming symptoms as are here recorded.

We quote also the following passages from the chapter on the "Treatment of Morphia Narcosis:"

"I think that we must conclude from what we at present know, that we are not justified in simply giving atropia in every case of opium narcosis to which we are called, with the expectation that atropia *alone* will do the entire work without aid, even if they are mutually antagonistic. There are other measures nearly, if not quite, as important, and should a patient die without their use, the physician must, of necessity, feel that there are fair grounds for the belief, that death was due to his culpable neglect."

Strychnia and caffen or fluid extract of coffee, are mentioned

as valuable agents to antagonize the poisonous action of morphia.

In the "Conclusions" he says: "Every physician should carry with him, in the same case with the morphine (so that when he takes the one he is obliged to take the others) the proper drugs to use in case syncope or narcotism result."

By having these drugs, the names and amounts of which should be plainly *printed* upon each paper, in the form of powders, they can be carried in a small compass—in the case containing the syringe. They are as follows:

6 $\frac{1}{80}$ gr. Atropia powders.

3 $\frac{1}{80}$ gr. Strychnia powders.

6 2 gr. Citrate of caffein powders.

6 1 gr. Carbonate of ammonia powders.

Or the same may be carried in solution.

He insists, wisely we think, that the physician should never direct or permit the patient or the friends of the patient to use the syringe, but should always administer the hypodermic injection himself.

A MANUAL OF AUSCULTATION AND PERCUSSION, embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism, by AUSTIN FLINT, M. D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Second edition revised. *Philadelphia: Henry C. Lea, 12mo.*

We will all gladly welcome a revised edition of a volume so well and so favorably known as Flint's Manual of Auscultation and Percussion. The name of the distinguished author is a guarantee of its excellence, and an extended review would be superfluous.

The same plan has been followed as in the first edition, for, as the author states in his preface, the favor with which the former edition has been received, has seemed to show that no radical changes were required.

We notice, however, certain changes and a considerable amount of additional matter. It is fuller as to details and explanations, and hence may be said to occupy an intermediate place between the first edition and Flint's larger works, "On the Respiratory Organs" and "Diseases of the Heart."

Among the changes, we notice two new physical signs which are styled broncho-cavernous respiration and vesiculo-cavernous respiration. The former is simply mentioned in the first

edition. The author states that this may be heard when "a cavity is situated in proximity to solidified lung, the quality and pitch of the inspiratory and the expiratory sound, may show an admixture of the characters of the two signs, and to a practiced ear, the combination is distinctly recognizable." In regard to the vesiculo-cavernous respiration, he says: "This occurs when a cavity is surrounded, not by solidified, but by healthy lung. Under these circumstances, over the site of the cavity, the inspiratory sound may be as loud as, or louder than, that around the cavity, but the quality is not purely cavernous; some vesicular quality is appreciable. A vesiculo-cavernous respiration, then, is a cavernous respiration plus some vesicular quality derived from the air vesicles which are proximate to the cavity."

In the chapter on "Diseases of the Heart" we find additional and marked prominence given to the value of the aortic and pulmonic second sound as evidences of mitral lesions. He notes especially the value of these sounds as a measure of the amount of obstruction and regurgitation. The importance of the accentuated pulmonary second sound as a sign of arterial tension in the pulmonary artery, and hence of obstruction to the flow of blood to the left side of the heart, is noted; and the value of this sign, first noticed by Skoda is duly recognized.

This volume should be in the library of every physician and student who makes any pretension to the knowledge of physical diagnosis of the diseases of the heart or lungs.

The press-work and binding is a credit to the house of Henry C. Lea.

THE THERAPEUTICS OF GYNECOLOGY AND OBSTETRICS, Comprising the Medical, Dietetic and Hygienic Treatment of Diseases of Women, as set forth by Distinguished Contemporary Specialists. Edited by WILLIAM B. ATKINSON, A. M., M. D., Author of "Hints in the Obstetric Procedure," etc., etc. *Philadelphia*. D. G. Brinton, 115 South Seventh Street. 1880. 8vo.; pp. 365. Price, cloth \$3.00; sheep, \$3.50.

This is the third volume of the "Modern Therapeutic Series." The two volumes, "Modern Medical Therapeutics," and "Modern Surgical Therapeutics," were edited by Dr. Napheys; and a part of the material for this volume was prepared by the same hand, Since his death, the work has been completed by Dr. Atkinson.

Each chapter is introduced with a "Synopsis of Diagnostic

Points;" and then follows a summary of the course of treatment adopted and recommended by different practitioners and writers. At the close of each article is given a "Résumé of Remedies," which have been recommended in the treatment of the disease.

The editorial work has been well executed, and the book will undoubtedly have a large sale, as have the preceding volumes of the series. The mechanical execution of the volume is admirable.

A TREATISE ON THE THEORY AND PRACTICE OF MEDICINE, by JOHN SYER BRISTOWE, M. D., London. Second American Edition revised by the Author with Notes and Additions by JAMES H. HUTCHINSON, M. D. *Philadelphia: Henry C. Lea.* 1879; pp. 1,080.

The second American edition of Dr. Bristowe's work contains even more than the second English edition of the author's own work, by an additional chapter upon insanity; the notes, and an article on "Hæmophilia," by the American editor, add to the excellent work very valuable information upon matters of particular importance to the American practitioner.

The plan of the work, and the very thorough method of treatment of every subject, entitle the treatise to all the praise it has heretofore received, and should commend it to the careful study of the practitioner, for information on the latest proven points in pathology and treatment of all matters pertaining to general medicine, the lectures upon "Diseases of the Nervous System" being of especially valuable character.

At this epoch, when every department of medicine and surgery claims so many observers, who are continually adding text books devoted to special studies, the preparation of a treatise which, without becoming too voluminous, shall contain a fair amount of recent and accurate knowledge, is extremely difficult, but, in the volume before us, the author and editor have succeeded in a manner which has undoubtedly secured position for the result of their labor of a most gratifying character.

The mechanical execution of the work is like all that comes from Henry C. Lea, all that could be desired.

BOOKS AND PAMPHLETS RECEIVED.

SORE THROAT; ITS NATURE, VARIETIES, AND TREATMENT; including the connection between diseases of the throat and other diseases. By Prosser James, M. D., Physician to the Hospital for Diseases of the Throat, etc. Fourth edition. Illustrated with hand-colored plates. *Philadelphia: Lindsay & Blakiston*. 1880. 12mo; pp. 318. Cloth, \$2.00. (Through Hugh R. Hildreth Printing Company.)

RESEARCHES ON HEARING THROUGH THE MEDIUM OF THE TEETH AND CRANIAL BONES. By Chas. H. Thomas, M. D. Read before the Philadelphia County Medical Society, Dec. 17, 1879. Reprinted from the *Philadelphia Medical Times*, Feb. 28, 1880.

THE FALLACIES OF POPULAR CLINICAL MEDICINE. By Jarvis S. Wight, M. D., Professor of Surgery. An introductory Lecture delivered at the Long Island College Hospital, Brooklyn, N. Y., Feb. 5, 1880. *New York: G. P. Putnam's Sons*, 182 Fifth Ave., 1880.

A PLEA FOR COLD CLIMATES IN THE TREATMENT OF PULMONARY CONSUMPTION. Minnesota as a Health Resort. By Talbot Jones, M. D., of St. Paul, Minn. Reprint from the *New York Medical Journal*, Sept., 1879.

THERAPEUTIC ACTION OF MERCURY. Inaugural Thesis read before the Chicago Biological Society, Feb. 4, 1880. By S. V. Clevinger, M. D., Chicago, Ill., U. S. A. Reprinted from the *Chicago Medical Gazette*, Feb. 20, '80.

AN ADDRESS ON INSANITY. By C. H. Hughes, M. D. Reprinted from the *St. Louis Medical and Surgical Journal*, Sept., 1879.

TWELFTH ANNUAL REPORT OF THE NEW YORK ORTHOPÆDIC DISPENSARY AND HOSPITAL, (for children with spine and hip disease). *New York: Slote & James*. 1880.

REPORT OF THE EAST SIDE INFIRMARY, for fistula and other diseases of the rectum. *New York: Ilsley & Marx*. 1879.

THE STRUCTURE AND OTHER CHARACTERISTICS OF COLORED BLOOD CORPUSCLES. Investigations laid before the New York Academy of Sciences, December 17, 1878, and before the New York Academy of Medicine, March, 1879. By Louis Elsberg. (Printed in the Annals of the New York Academy of Sciences, Vol. I., Nos. 9 and 10.) *New York: G. P. Putnam's Sons.* 1879. 12mo; pp. 50. Price 25 cents.

THE PRINCIPLES AND PRACTICE OF GYNÆCOLOGY. By Thomas Addis Emmet, M. D., Surgeon to the Woman's Hospital of the State of New York, etc. Second edition, thoroughly revised. With one hundred and thirty-three illustrations. *Philadelphia: Henry C. Lea.* 1880. 8vo. (Through Hugh R. Hildreth Printing Company.)

THE ESSENTIALS OF ANATOMY. Designed as a text-book for students, and as a book of easy reference for the practitioner. By William Darling, M. D., F. R. C. S., Professor of Anatomy in the Medical Department of the New York University, and Ambrose L. Ranney, A. M., M. D., Adjunct Professor of Anatomy in the Medical Department of the New York University. *New York: G. P. Putnam's Sons,* 182 Fifth Avenue. 1880. 8vo; pp. 629. Price \$4.00. (Through the St. Louis Book and News Co.)

NOTES ON THE ANATOMICAL RELATIONS OF UTERINE STRUCTURES. With surgical remarks and therapeutical suggestions. By J. H. Buekler, M. D., Baltimore, Md. Reprinted from the *Boston Med. and Surg. Journal.* *Cambridge:* Printed at the Riverside Press, 1880.

ELEVENTH ANNUAL REPORT OF THE TRUSTEES OF THE WIL-LARD ASYLUM FOR THE INSANE, for the year 1879. *Albany: Weed, Parsons & Co.*

REFLECTIONS UPON THE HISTORY AND PROGRESS OF THE SURGICAL TREATMENT OF WOUNDS AND INFLAMMATIONS. A report on the Progress of Surgery. By Edward Borek.

FUNCTIONAL HEART TROUBLES. By Charles Kelsey, M. D. Reprinted from the *Hospital Gazette*, May 31, 1879.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, Feb. 19th, 1880. Dr. Maughs, Vice-President, in the Chair.

Discussion on Dr. S. G. Moses' paper, on Post-Partum Hemorrhage. (See *COURIER* for March, p. 221.)

Dr. S. G. Moses, having given a short résumé of his paper, *Dr. Engelmann* spoke on the subject as follows: The subject is one of considerable interest to me. I have adopted a method of treatment, which was forced upon me, in the first place, as a necessity, but which proved so successful that I have followed it ever since, and can now recommend it as safe and reliable.

It brings us back to the old question regarding the use of iron. I agree perfectly with Dr. Moses in everything he has said, and I think he, too, allows, that, in extreme cases, he will resort to the use of iron, but that the injection of the perchloride of iron, although certain, is by no means a safe remedy. Before I allude to that plan of treatment, I will say that in every labor case, there are certain points which deserve the most careful attention, with reference to the prevention of hemorrhage. One is the expulsion of the placenta; the other is, *not* to leave the patient as soon as the delivery is accomplished. Dr. Moses, as you will remember, related a case which was very much to the point: He was accidentally detained by a heavy snow storm, after delivering his patient, who was so well that he should not have remained, had he been able to reach home; he had hardly retired, when he was called, and found his patient blanched, and a very alarming hemorrhage in progress. In reference to the treatment, I think Dr. Moses told us that he first endeavors to stimulate the uterus by pressure and friction. To seize the uterus firmly and com-

press it, is an advice frequently given, but it is not so easy a thing to grasp the distended uterus—you can hardly do so, unless you place one hand in the rectum, and the other hand externally upon the fundus; which, by the way, some few authorities recommend. Pressure, and then friction of the fundus, should be attempted; yet I do not think that much will be accomplished, unless friction be made with a lump of ice, or the hand dipped in cold water. The bladder should always be emptied, if at all distended.

In case these means do not suffice, the hand should be introduced into the vagina, and the clots removed; if this does not produce sufficient irritation to cause uterine contraction, I would not hesitate to enter the uterus and clear that of clots. When the hand is in the uterus, and the coagula are removed, the organ should be compressed between the knuckles of the one hand, which, moreover, irritate by rubbing against the inner surface of the uterus, and the other hand externally upon the fundus; if this does not arouse the uterus to an active response, we are, to my mind, fully justified in resorting to the use of iron, but not by the ordinary method, as originally advised by Barnes, the injection of perchloride of iron into the womb. I have, in place of this, swabbed the bleeding cavity with cotton, saturated with the styptic fluid, after removing the coagula as carefully as possible.

I was lead to do this in the first case of post-partum hemorrhage which occurred in my practice, by being hurriedly called from my office, and having my gynecological case with me. The patient had been delivered by a midwife, who had left about three-quarters of an hour after the expulsion of the child; I found the patient cold and pulseless; the flow had been profuse—in fact, it was a desperate case. There was no time to be lost. It was in Summer, and there was a pitcher of ice water at hand, and I placed a piece of ice upon the fundus, and with my hand introduced another lump into the womb, at the same time clearing out the clots. But all this did not answer. I then brought the patient around in the bed, introduced a bivalve speculum, and with my dressing forceps and cotton wads, I cleared out the remaining clots. I could not cleanse the cavity perfectly, because the blood was flowing fast. In the mean time the husband had been preparing the iron cotton, steeping balls of cotton, of the size of a walnut,

in a solution of perchloride of iron. I then took one after the other, as they were prepared, and introduced them into the uterus, thoroughly swabbing the inner surface of the uterus; withdrawing the coagula with each cotton wad, in that way causing mechanical irritation, bringing the iron in contact with all the parts, and at the same time removing the dangerous coagula. The uterus contracted firmly and rapidly. Since that time I have used this treatment, and I have seen a number of serious cases where it has answered admirably. I think that in those cases where it is necessary to resort to the use of iron, we have, in this, a ready and safe means, instead of those dangerous injections.

I have never met with a case of post-partum hemorrhage in my own practice. The cases which I have attended, were all consultation cases, and in only one of them was I present from the beginning. They were all cases in which ice had been used internally as well as externally, cold water had been applied and friction resorted to. I have never seen a bad getting up, never a resulting septicæmia, and septicæmia is one of the greatest dangers always to be dreaded after the injection of perchloride of iron into the uterus. Of course the immediate result of the injection is excellent, but clots form and begin to disintegrate toward the third day, and upon that day the first chill generally occurs; this is the history of many cases of post-partum hemorrhage treated by the injection of perchloride of iron, and it happens so frequently, that this method is tabooed by a great many, I may say, by all of our leading American obstetricians.

There is another point worthy of mention on account of frequent abuse, and that is the free use of ergot in post-partum hemorrhage. I think that when used very liberally, it will often cause prostration and weakness. The patient is almost pulseless, weak as she is by copious loss of blood, and the stomach will not absorb the ergot which lies there useless, or worse than useless. If it is to be resorted to at all, I think it should be used subcutaneously. I think when used in the way suggested, iron is perfectly safe. By this method, whenever we draw out the swab we draw out with it all the clots. I wish also to call the attention of the Society to the use of the subcutaneous injection of ether.

Dr. McCann, in a paper in the *London Obstetrical Journal*,

recommends the use of these injections in the prostration following post-partum hemorrhage. He injected it with the view of relieving the prostration. I have, however, a letter from my friend, Dr. Chadwick, of Boston, who tells me that he has used the subcutaneous injection of ether in five cases of post-partum hemorrhage for the purpose of stopping the bleeding, and with success. He has seen the hemorrhage checked in every case, and, as he tells me, within not more than five minutes after the injection of the ether. I have never tried this, and cannot speak from experience, but I do know that the doctor's word can be relied upon. He says he resorts to ether now very soon after finding that friction or pressure upon the uterus will not answer.

Dr. Yarnall.—In relation to the use of ergot, it has been a custom of mine for the last five years, to almost invariably administer ergot just before the completion of the second stage of labor. I was induced to do this in attending a patient a number of years ago, who, in a previous labor, had come within an ace of dying from post-partum hemorrhage; anticipating this trouble, I administered the ergot as stated, with the result of preventing hemorrhage. From that time on, I have been in the habit of using it; it is almost a sheet-anchor with me. Not long ago I was called to a woman whom I delivered successfully; the child was alive; the hemorrhage had ceased; and I was about leaving the house, when suddenly there was a gush of blood, and the patient passed away. I could not use iron in that case, there was no time; but I was sorry I had not been able to do so. A few weeks ago I read a paper which suggested the use of hot water injections, and I came to the conclusion, if it should be my lot to have another case of post-partum hemorrhage, to make use of the hot water; but the difficulty is that unless you carry your syringe with you, you are not always prepared. I have frequently made use of ice, and, with the exception of this one case, I do not think I have lost a case from post-partum hemorrhage.

Dr. Prewitt.—I recollect being in consultation with Dr. Rohlfsing, in a case in which I used ice and persulphate of iron, and the woman ultimately recovered. I should not hesitate to make use of iron, if all other things failed, but I should make use of water first.

Dr. Engelmann, in response to a question regarding the emp-

tying of the bladder, in hemorrhage, said: I do not think the bladder acts entirely by mechanical interference, in preventing uterine contraction; it acts partially by inducing nervous disturbance. But I have seen two cases, at least, where the emptying of the bladder was followed by cessation of the hemorrhage, seemingly permitting the uterus to contract. Neither of them, indeed, were alarming cases of post-partum hemorrhage, but there was an undue loss of blood. The uterus was very high up and not fully contracted. A very much distended bladder, evidently prevents the uterus from coming down fully. In both these cases, it was unusually high up, and seemed soft, and not firmly contracted. Since then, I have always paid attention to the bladder.

Dr. Gehrung.—The mechanical interference should be very little, because it would only be a continual pressure in the neighborhood of the uterus; but it certainly would be somewhat in the way of the hand in manipulation to cause contractions of the womb; and in so far, it is a mechanical hindrance. But I think the true principle upon which its interference depends, is this: If the brain, or certain nervous centers are occupied particularly with one organ, they cannot so well attend to, and act upon, another. It appears that the brain functions attend chiefly to one organ at a time. This principle being admitted, I think that it is more probable that the beneficial result of the use of ether, is due to its quieting and soothing influence upon the nervous centers, allowing the nervous center presiding over the uterus, to perform its duty properly. I think that it acts more as a sedative, than as a stimulant, in such cases.

Dr. Moses.—A very ingenious idea. I have used injections of ether in great prostration from other causes, and so far as my limited experience goes, I have not seen the good effects result from it, that I expected. But certainly it is very valuable in enabling us to stimulate the system, without putting anything into the stomach. Therefore, in my paper I spoke of the hypodermic use of ergot. In many cases we are deterred from using it, entirely from the fact that it nauseates the patient. It is only when it has its full oxytocic effect, that it is of any use at all. Since reading that paper, I have seen a very interesting paper, in the discussions of a gynecological society. In a case of retained placenta, from irregular uterine contrac-

tions, the contractions were not so great after the use of the ergot, which was one of the reasons why the author opposed the use of ergot in these cases.

Dr. Engelmann.—Nitrite of amyl has been mentioned as an excellent means of checking the hemorrhage. Köhler, a German professor, stated that he used hot applications to the head in cases of bleeding from the womb, to prevent anemia of the brain. The idea was taken up by an English practitioner, who consequently tried nitrite of amyl in a case where ergot failed, and was so much pleased with the result, its rapid and successful action in checking the hemorrhage, that he has used it in a number of cases, which he reports in an English obstetrical journal.

Dr. Gehrung.—Hot applications to the spine have also been used. They seem to act on the principle of producing repletion of the cutaneous capillaries. Any hot application to those parts seems always to heat up the skin. The extremities grow warm, perspiration takes place, the patient grows quiet, and sometimes sleep is produced. It is easy to understand that it should assist considerably in causing an arrest of the hemorrhage by diverting the blood to the circumference, instead of allowing it to collect at the central organs. How far it acts on the contractions, I cannot say.

Dr. Engelmann.—Hot water seems to be growing in favor. I saw a very interesting paper on the subject in a German obstetrical journal, based upon 113 cases successfully treated by the hot water douche in hospital practice. The writer seems to have studied the subject carefully and, gives particular directions as to the manner of making the injection; he lays great stress upon the necessity of clearing the uterus thoroughly before the hot water is used, also that a sufficient quantity be used, and that it be hot enough. His practice was to use the water between 112° and 120° F., but he says it can be gauged with sufficient accuracy by just being able to move the hand about in the water. Carbolic acid is added until a strength of one per cent. is obtained. The woman will complain of a sensation of burning, but she can bear it. He allows the use of a glass nozzle. I think that neither glass nor metal should be used, because the heat of the nozzle is almost scorching to the patient, hard or soft rubber is far preferable. He asserts that hot water does not cause uterine contraction, or at least does

not cause it to the extent that a styptic will; but that it causes an extravasation of the serum and lymph into the interstitial connective tissue by which the muscular tissue of the womb is distended and swollen, and the blood vessels are compressed so that a womb that has been injected with hot water will not present the small, hard globe, but remains comparatively large, and is somewhat doughy and soft. He says that if you check the hemorrhage by hot water injections, and then put ice into the womb, the hemorrhage will return, because the serum and lymph that have transuded, are then again absorbed, and the womb again relaxes. Cohnheim, in his experiments showing the development of inflammation, would tie the leg of a rabbit or frog, and then place the leg in hot water for about five minutes, then upon removal of the ligature the same condition is found to exist.

REPORTS OF CASES.

Dr. S. G. Moses.—I desire to report a case and ask the experience of the Society in similar instances.

A lady who has had one child and one miscarriage, in 1876, and has enjoyed singularly good health since, applied to me the other day on account of a peculiar discharge from the nipple. I have never seen a case exactly like it. She suffers no pain in the breast. In order to collect this fluid so as to examine it afterwards, I used a nipple shield. In using this, the breast became bruised a little, and some little hardness was produced, which, however, has passed away. I take the case to be an irritation of one of the milk tubes, although the tube is not prominent. The balance of the breast and of the nipple appear to be perfectly normal. The patient is otherwise in good health. There is no induration nor excoriation at this point; nor is there any tenderness or suffering of any kind. The discharge has lasted for two years. She never had any secretion of milk.

Dr. Prewitt.—In cases of cancer of the breast, there is sometimes a small discharge from the nipple. Are you certain the hardness was not there before the nipple-shield was put on? Is there no blood in the discharges? Does it not look pinkish?

Dr. Moses.—No; it has a limpid appearance, with sometimes a yellowish tinge. There has been at times a very slight excoriation, just at the spot where the discharge exudes. The

amount of fluid is not increased by pressure, and there was no hardness until the shield had been used.

Dr. Engelmann.—It is likely, then, that the secretion is from a very small surface, for if it were from a large surface, you would get more by pressure. Would not astringents locally applied be of service?

Dr. Moses.—I did try the application of an astringent once, but it seemed to have no effect. I have been using atropin upon the whole breast.

Dr. Maughs.—I believe I have seen a few cases that were not nursing, that had a slight discharge from the nipple, without anything serious attending it. It would be just possible that a commencing carcinoma might cause it, but it may occur without it just as readily. Two years is time enough for anything serious to have developed itself.

Dr. Yarnall.—I wish to report a case of trismus that I treated last Fall, with minute doses of bromide of potassium and chloral. There was a good deal of rigidity, not only of the masseter muscles, but of various muscles. I directed them to keep the child under the influence of chloral. When its effects passed away, the child would have a little paroxysm, and the people would resort to the medicine again. The child eventually got well.

Dr. Moses referred to several interesting cases reported in the *Obstetrical Journal of Great Britain and Ireland*, of tetanus treated without medicine. He spoke of several cases treated by a London physician, where the patients died, notwithstanding treatment by medicine and the most nourishing diet.

Dr. Yarnall.—Some years ago Dr. Papin treated a case of trismus, a very violent case, with inhalations of chloroform, and he blistered all the vertebræ with chloroform also. The child got well and the case was reported in the journal then called the "*Medical Archives*."

In the absence of the author, Dr. S. G. Moses read a paper by Dr. G. A. Moses, upon "The Surgical Treatment of Carcinoma Uteri."

MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, Nov. 10, 1879. Dr. Maughs in the chair.

FELT AND PAPER BRACES IN SPINAL CURVATURE.

(For report of case, by Dr. Steele, see page 350.)

Dr. Prewitt.—The paper jacket exhibited by Dr. Steele, is a very excellent brace for the purpose of supporting the spine; certainly better than the plaster of Paris jacket, though it takes a great deal more trouble to make it. I have recently applied, to a little patient, a felt jacket that can be moulded to the body, lighter even than the paper brace, and more porous. It is fastened in front with buckles. In case of antero-posterior curvature high up, there can be a “jury mast” attached to it, just as in Sayre’s plaster jacket. It is seemingly perfect. It is infinitely more comfortable than the plaster of Paris jackets which I applied several times before. Of course all these braces for lateral curvature, are temporary expedients; they may hold what is gained, but they cannot cure. To do that, the muscles must be strengthened. I have a patient under my care now, with a lateral curvature from a mechanical cause. He acted as nurse to his little brother, and carried the child almost always on his right arm. In cases in which the curvature is not determined to the left by mechanical causes, it occurs on the right side. Barnwell explains this by the fact that the right lung is larger than the left, and the constant slightly increased action of the ribs of that side, leads to rotation of the vertebræ to the same side, followed or accompanied by curvature. There is always rotation in these cases; in fact the rotation may be said to antedate the curvature. When once started, of course, its tendency is to increase. This is to be counteracted by gymnastic measures; not by a simple brace, which would, alone, rather increase the trouble. The paper brace exhibited to us, is certainly a very admirable thing, but I do not think it has any advantage over the felt, which accurately moulds itself to the chest.

Dr. Steele.—I have had no personal experience with the felt jacket, but I cannot believe it to be as strong as the paper brace I show you. Several weeks since, a felt jacket was applied to a little girl suffering from lateral curvature, by an instrument maker, she patiently enduring the trying ordeal of lying many hours perfectly still, while it was hardening. The first day it was worn, she went to school; when becoming warm, and perspiring freely, the jacket doubled up like a wet rag, stiffening all gone, and became about as useless as so much putty. Soon after, I being called in, applied a paper brace, prepared as already described, which she has worn with great comfort, and most perfect support ever since.

The brace I exhibited, is for a young man in business, obliged to take active exercise, and thus requiring very firm support; more, in fact, than the felt could afford. It may be that with young children, and properly applied, it will answer a good purpose, but I would hesitate about trusting it in the case of adults.

The doctor, happily, did not tell us that he endorsed Barnwell's solution of the problem, as to the cause of lateral curvature. I certainly do not. It does not account for the vast preponderance of cases in the female, nor for the occasional cases of deflection to the left, nor for the cases in which the primary curve is in the lumbar region. But, in the latter case he says it is due to an unequal distribution of weight on the two sides of the pelvis, as when there is an inequality in the length of the limbs. And yet we do not find that all those cripples who bear their weight mostly or entirely on one limb, have lateral curvature of the spine. And the same observation holds with those who have lost an arm; lateral deflection to the opposite side, is not invariably found. It would seem that Dr. Shaffer is in the right direction, when he indicates that there is, in some organ or part of the body, an irritation, inducing a reflex action, so that there is either a spasm of the muscles on one side, or a paresis on the other, either case necessarily resulting in a lateral deflection. May it not be possible that the sensitive sexual organism of girls approaching puberty, is the focus of irritation with them, and thus the frequency of spinal curvature among that class? But whatever the cause may be, whether it still exists, or whether it has passed away, leaving the deformity as a result, we, as practical surgeons,

are especially concerned in the treatment, and I believe that the plan I have suggested, will be found the most rational and successful.

Dr. Holland.—The paper and felt splints have been spoken of for persons who are able to go around. I have now an interesting case of paralysis, resulting from a posterior curvature of the spine, at about the tenth or eleventh dorsal vertebra. The history dates from a fall upon the ice, from which, however, she seemingly recovered, in a few days. She was afterwards married in the month of March, and in June following, began to feel that she could not walk as nimbly as before, and in the course of some six weeks, she could not move her lower limbs. She soon afterwards came under my care at St. Mary's Infirmary. The curvature is very marked, and I have just taken off a plaster of Paris bandage that I put on some six weeks ago, with marked effect, as regards freedom from pain, and sense of ease. Before its application, she was continually troubled with cramps in her legs, at night. For the bandage, I used, by preference, the dental plaster, believing it superior to any other for that purpose. It relieved her greatly, and there was a noticeable improvement in her condition. A short time since I discovered some unpleasant odor about the back. So I took off the brace a little earlier than I otherwise would have done. I found an ulcer over the prominent point of the spine which had not been protected as much as it might have been. I mention that case to show that the plaster of Paris could be worn in comfort, which I am convinced could not be done so effectually with either the paper or felt braces, without danger of breaking them up.

[Since the above report was made to the Society, I will state that another Plaster of Paris Jacket was placed upon this patient, which remained about three months, securing perfect rest for the patient. When taken off the patient seemed nervous and restless. Besides, for about one week she was not enabled to empty the bladder, but after this she overcame that difficulty, and is now comparatively comfortable, but wants the plaster on again.]

Stated Meeting, November 24, 1879. Dr. S. G. Moses in the Chair.

OCCLUSION OF FISTULA.

Dr. Todd presented a specimen, which he said was of interest specially as a study in comparative anatomy. About two years ago he had made a gastric fistula in a dog, introducing a silver canula with two broad flanges so as to hold the instrument in place. As is usually the case in these operations, there was very little reaction—the peritoneum in the dog is not so apt to set up inflammatory action as that of the human being. The dog had recovered entirely from the effect of the operation; and the doctor had made use of him during two successive winters for the purpose of procuring gastric juice for his physiological experiments. He had not paid any attention to him for some months, but recently, having occasion to repeat the experiments before his class, he had attempted to procure the gastric juice, as usual, by introducing a catheter through the canula. He found it impossible to pass the instrument, and observed that there was a very considerable mass of cicatricial tissue about the flange of the canula. The animal had for some time appeared to experience some inconvenience or discomfort from the presence of the canula and the callous mass surrounding it, and he determined to sacrifice the animal in a vivisection which he made last Saturday. The doctor then presented the specimen which he had removed from the animal. The canula was completely buried in a mass of dense callous or cicatricial tissue, and was connected to the stomach by a firm fibrous cord about an inch in length. The inner surface of the stomach showed at the point where this cord was attached, a depression and puckering of the mucous membrane, all that was left of the fistula which had been completely occluded.

In answer to questions as to the vivisection, *Dr. Todd* stated that he always had the animals completely anæsthetized when he made those experiments, that he thought dogs succumbed more easily to the influence of chloroform than human beings. *Dr. Todd* has used a screw stopper for the canula in making gastric fistulæ, which he finds much better than a cork.

Dr. Prewitt thought this a very interesting and instructive specimen. The same thing might occur in the human subject. It is only within the last three years that the operation of gastrotomy has been successfully performed. Trendelenburg of Rostock, Verneuil of Paris, and Herff of Austin, Texas, have each reported a successful case of this operation, where the life of a patient has been saved by the establishment of a gastric fistula. If such fistulæ are liable to become occluded as in this case, it would impair the value of the operation. Probably, however, this would not occur where the fistula was kept in use by the regular introduction of food through it.

Dr. Briggs asked *Dr. Todd's* view as to the pathological process which had taken place in this case, whether there had been any opening created between the stomach and the intestinal cavity.

Dr. Todd said that he supposed that, by the constant peristaltic movements of the stomach in the process of digestion, and of the other muscles in locomotion, the portion of the stomach which was held by the flange of the canula had been drawn upon, and gradually a canal had been formed, which had become occluded by the growing together of the opposed surfaces. This was a matter of special interest, inasmuch as mucous surfaces do not generally manifest any disposition to unite.

Dr. Maughs thought that this should be looked upon as a remarkable example of the reparative power of nature. There could be no question as to the process. As *Dr. Todd* had stated, the point attached to the canula had been drawn upon until a pouch and then a canal had been formed, then the mechanical irritation had caused ulceration and raw surfaces, which had grown together and produced the firm cord-like band which was found in the specimen. It was a very valuable instance.

Dr. Prewitt did not mean to be understood as thinking it probable that such a process would occur in the human subject. Certainly the case of Alexis St. Martin showed that gastric fistulæ might remain open for a good many years. Accidental fistulæ had occurred in a number of instances, and all efforts on the part of the surgeons to close them had been unsuccessful. *Bilroth* detached the stomach entirely from its connections to the abdominal wall in order to cure one of those cases. This case is interesting as an example of the manner in which con-

nective tissue thins out after a time. It has a bearing upon the operation for the radical cure of hernia. As a rule these operations are only temporarily successful. After a time the cicatricial connective tissue yields under pressure and ceases to be effective in retaining the hernia. It is not uncommon to find in recent cases of pleuritis, layers of lymph of considerable thickness, even a quarter of an inch, but in old cases the adhesions are always drawn out and thinned.

Dr. Nelson presented a specimen of stricture of the œsophagus. The patient had been under the care of *Dr. Pollmann*, who had kindly placed the specimen at his disposal to present to the society. See Cases from Practice, p. 344.

Dr. Nelson related, in connection with this case, an incident of his student life. One of the bears in *John Robinson's* circus had died, after having been troubled for some months with indigestion, such that constantly, some hours after eating, a considerable portion of the food would be vomited in a half-digested state. The dead animal was sent to the medical college, and, on dissection, a stricture about an inch broad was found at the lower end of the œsophagus, which was itself enormously dilated, and filled with a quantity of half-digested food. There was no history to account for the stricture.

Dr. Maughs thought that the adhesions to the lung tissue might have resulted from inflammatory action, following the use of the instruments. In a softened mass, such as this was said to have been in the recent state, the instruments might readily sink by their own weight into the tissue itself, thus making false passages, instead of dilating and following the course of the natural passage. It might be that the adhesions were caused simply by the effect of the carcinomatous disease.

Dr. Nelson thought this last was more probable, as there was no account of acute inflammatory action, which would have been the case if the inflammation had been set up by mechanical irritation from the bougies.

Dr. Prewitt thought this an admirable illustration of the utter futility of attempts to dilate strictures of the œsophagus, that they never accomplish the object aimed at, and often do positive injury. Where the stricture is the result of cancerous deposit, the tissue is easily penetrated, and a bougie is very likely to pass into the connective tissue and produce false

passages, instead of following the course of the œsophagus itself. Where the stricture is the result of swallowing caustics, as lye, the passage is apt to be very tortuous, and it is almost impossible to pass a bougie without penetrating the walls. He had seen a number of such cases, and had sometimes attempted to dilate with bougies, but had never seen a case where he felt that anything had been accomplished by such attempts. He thought Dr. — had adopted that view in the treatment of his own little girl, who suffered from a stricture, caused by swallowing lye: thought that he only used bougies, when occasionally, a portion of food had lodged in the stricture. *Dr. Prewitt* thought that much the same might be said with regard to urethral strictures. Force should never be used in catheterization or passing a sound. He was disposed to take the ground that the use of bougies in œsophageal stricture, for the purpose of dilatation, is never justifiable.

Dr. Todd said that he was reminded by *Dr. Prewitt's* remarks, of a specimen which he saw in the Anatomico-pathological museum, at Vienna. The preparation consisted of the bladder, urethra, and enlarged prostate; some bungler, in attempting to pass a catheter, had forced the instrument through the urethral wall, the trigonum and the prostrate gland, into the bladder.

Dr. Prewitt mentioned two cases which he saw when in charge of the City Hospital; in one case the patient was in a state of collapse when brought to the Hospital, and the post-mortem examination showed numerous false passages made, in the attempt to catheterize by some outside surgeon; in the other case, the doctor used the aspirator a number of times, but the patient died from gangrene, caused by urinary infiltration of the perineum, caused by the injuries produced in forcible attempts to pass the catheter before his admission to the hospital.

In another case, an irregular practitioner had sent a patient whom he had been unable to catheterize, with the remark, "You know I am a pretty strong man, but I could not push the catheter through."

Dr. G. A. Moses presented a specimen of fibroid tumor of the uterus. (See Case from Practice, in January COURIER, p. 48.)

SELECTIONS.

AN IMPROVED METHOD OF TREATING THE NEW
BORN CHILD.

In my treatment of the newly-born infant—It is not washed. It is not dressed. It is not fed. It is not bandaged. Its umbilical cord is not compressed. As soon as the child is expelled from the mother, it is placed on its right side, in a comfortable position for breathing, and kept well under the bedclothing until the cord ceases to pulsate. This is for the retention of the additional grams of blood. Not wishing to sever the cord like other animals, I nick it slowly with a pair of dull scissors, then catch it close to the abdomen, between the thumb and index finger of the left hand, and strip out the blood and gelatin with the thumb and index finger of the right hand, then throw a ligature around it. In my own household, I do not ligate the cord. It is nicked off slowly, allowed to bleed for a few seconds, stripped well to collapse the vessels, and then left dangling in that condition. It dries rapidly, curls upon the abdomen without giving trouble or being in the way, and drops off in a day and a half to four days, without irritation and but little fetor. After ligating the cord, a coating of fresh, soft lard is quickly applied to the whole surface of the child except its face, which latter is to be wiped off with a damp cloth. A napkin is applied about the hips, and it is quickly slipped into a soft flannel gown, enveloped in a proper blanket, and laid in some comfortable place; it can then suck its fists or test its lungs and vocal cords. If the mother is healthy, she can suckle it when she feels inclined, but it is to have nothing except what it gets from her breasts; some infants sleep twelve hours before they nurse.

In twenty-four or thirty-six hours the infant has become somewhat accustomed to the great change in temperature it has been subjected to. The nurse can then give it its first ab-

lution. Upon removing the gown, she will find its skin perfectly clean of the vernix caseosa, smooth, soft and velvety. After quickly bathing and drying, it is to be re clothed in napkin and gown, as at first. This is to be followed from day to day, until the cord drops off, when it can be turned over to its sympathizing torturers, to be dealt with as they are inclined, and to have its band applied every morning, and removed in a roll from under its arms each evening and *vice versa*.

Should the infant be troubled with colic from overnursing, it can generally be relieved by three or five grains of the following admirable combination :

R. Magnesiae ust.,	grs. xx.
Pulv. rhei.,	grs. x.
Ol. Anisi,	gtt. x. M.

—W. J. Craig in *Med. and Surg. Rep.*, Jan. 3, 1880.

PROPHYLAXIS OF PUERPERAL SEPTICÆMIA.

At the Preston Retreat, "Prophylactic measures are strictly enforced, and are considered of the greatest importance. As soon as a women falls into labor, she has a warm bath for the whole body. No digital examination is made until the physician's hands have been thoroughly washed with carbolic soap and nail-brush, and then lubricated with carbolic lard. The nurse also washes the person of the patient with carbolized water, and with a small sponge washes out the vagina with the same solution. After confinement, some oakum and a carbolized solution is given the patient, with which she washes her person twice a day, which is subsequently thrown away. The nurse never performs this service, unless the patient is very sick. The bodily temperature is taken night and morning. When the thermometer indicates 100°, a powder is given containing morphia, grains, one-fourth, and quinia sulphate, grains, x, and repeated every two hours, which reduces the temperature and puts the woman to sleep.

There is another point. He [Dr. Goodell] had been struck

with a remark made by Dr. Hodge many years ago, that the position of a woman upon her back, after confinement, owing to the curve of the vagina, and the swelling of the vulva, caused retention of the lochia. Upon this hint he had founded and adopted a plan which he called puerperal gymnastics. Every woman on the day after her confinement, sits on a chair while her bed is being made. Then he was accustomed to use some mode of irrigation in suspected cases. It is very desirable to avoid introducing the hand into the vagina in such cases, for fear of infecting other patients. The glass nozzles of Dr. Chamberlain can be introduced up to the fundus of the uterus, if desired, without inserting the hand at all.—*Phil'a Med. Times*, Feb. 14, '80.

PERSISTENT HICCUP.—In a paper read before the Northern Medical Society, of Philadelphia, Dr. Rihl reports a case in which “The patient had, during her hours of wakefulness, continuous hiccup for six weeks, then an intermission of fifteen days, then with an occasional intermission, in all only seven days, for nine weeks longer, so that in seventeen weeks she had fourteen weeks of hiccup. The number of hiccups was several times counted, and found to be nine hundred in an hour, though on one occasion four hundred in one quarter of an hour, were counted. On an average, she hiccuped 15,000 times a day, or during the whole period, probably not far from a million times. There was an entire absence of fever. Those who have not seen cases of this kind, which, fortunately, are extremely rare, can hardly conceive the distress produced by the persistence of this obstinate symptom. The galvanic battery seemed to be the only appliance which exercised any permanent influence over the hiccup.” The patient suffers from an obscure nervous affection, probably spinal; suffering almost constant pain, especially along the spine, which is exceedingly sensitive to pressure. She has almost daily, headache, with much pain in abdomen and chest. She has no leucorrhea, and her menstruation is regular. She has never been willing to submit to a vaginal examination.—*Med. and Surg. Report.*, Feb. 21, 1880.

NOTES AND ITEMS.

FOREIGN BODIES IN THE VAGINA.—Drs. Carter and Daly report a case of foreign body retained in the vagina of a girl, aged 17, for four years. She had passed a reel into the vagina to stop the flow of blood, when the menses first appeared; from that time she suffered from a fetid, watery discharge, often sanious. Upon examination the reel was found imbedded in cicatricial tissue, which was freely incised to effect the removal. Two years subsequently, an operation was performed, as marriage was contemplated, and the vagina was found to be contracted with cicatrices. Shortly after she became pregnant, and labor was induced at the eighth month, the vagina being still strictured. The cicatricial bands had to be incised and forceps applied. The child was born living, but soon after died. The second labor was allowed to proceed to full term, the cicatricial bands were incised, delivery occurred naturally, and the child at date is still living.

Dr. Carter reports the following: The patient, aged 20, two years previously had passed a metal cup into the vagina. At first it caused great pain and some bleeding, but this soon ceased, and she became regular. Six months afterwards the urine begun to dribble away. The body was removed, it was covered with phosphatic deposits; part of it was in the bladder, making an opening two inches in diameter.—*Report Lon. Obstet. Soc.; Lon. Med. Times and Gazette*, Feb. 14, 1880.

AUBANEL PRIZE.—The Medico-psychological Society of Paris, France, will, in 1881, award the Aubanel prize of 3,000 francs for the best treatise on a subject of mental and nervous pathology. The manuscript must be presented before January 1, 1881, to the general secretary, M. le Dr. Motet, 161 Rue de Charonne. They must bear a motto which is to be reproduced upon a sealed envelope containing the author's name.—*Le Progrès Médical*, Jan. 31, 1880.

LENGTH OF THE FETUS.—M. Hamy has been making careful researches as to the length of the fetus at the successive periods of development.

The following are the results of his measurements :

AGE.					LENGTH.
2½ months,	-	-	-	-	22 mm.
3 “	-	-	-	-	59 “
3½ “	-	-	-	-	95 “
4 “	-	-	-	-	138 “
5 “	-	-	-	-	256 “
6 “	-	-	-	-	314 “
7 “	-	-	-	-	380 “
8 “	-	-	-	-	416 “
9 “	-	-	-	-	485 “

He finds the fetus of the negro always smaller than the white fetus.—*Le Progrès Médical*, Feb. 28, 1880.

ANCIENT BUTTER.—Wigner and Church read a paper before the English Society of Public Analysts, in which they report a specimen of Irish bog butter which is estimated to be 1,000 years old. Its fatty character had entirely changed, so that it had become a substance closely resembling stearine, the same effect having been produced by time and exposure to moisture which the manufacturers effect by the agency of heat and acid. The other sample had been taken from an alabaster vase in an Egyptian tomb ; it had evidently been melted and poured into the vase, and carefully sealed over. Though probably about 2,500 years old, it had been so perfectly preserved that it was only slightly rancid, and had fully retained the chemical properties of genuine butter, the fat not having been decomposed to any sensible extent. This sample possessed a decided taste and smell of butter, while the sample from the bog was cheesy rather than buttery in smell.—*Am. Jour. Pharm.*, March, 1880, from *Chem. News*.

VARIOLA.—MM. Méjia and Decourt, two young physicians attached to the hospital service in Paris and Lyons, have recently died from variola contracted in the discharge of their professional duties as hospital externes. Only a short time previously, the death of M. Vignes occurred from the same cause.—*Le Progrès Médical*, Feb. 28, 1880.

LACERATED CERVIX.—O. E. Herrick suggests a modification of Emmet's operation for lacerated cervix. He freshens the edges of the laceration, but instead of applying sutures as Emmet directs, he encircles the neck with a rubber ring or with several of the little rubber loops that are found at the stationers' and are used for holding papers together.

He claims the following advantages from this modification of the operation: First, as about all the pain experienced during the operation is from the introduction of the sutures, if these are omitted, an anæsthetic may be dispensed with. Second, if the patient is not etherized, it is not absolutely necessary to have professional assistance, and one can operate upon patients that would not listen to such a proposition if strange physicians were to be present. Third, the parts are kept in just as close contact, and union takes place just as soon. Fourth, there is less danger of inflammation taking place in the parts. Fifth, there are no stitches to remove. Sixth, in slight cases patients may be operated upon at the office, and even without their knowing that they are undergoing any important operation, as they are not obliged to keep their beds a single day on account of it.—*Med. and Surg. Rep.*, Jan. 17, 1880.

NITRITE OF AMYL.—When inhaled in small quantities, it produces recovery from chloroformic insensibility by dilating the arterioles of the brain, and thus removing the cerebral anemia due to the chloroform.

When inhaled in large quantities, instead of producing recovery from chloroformic insensibility, it not only retards it, but it may cause death by paralysis and overdistension of the heart and engorgement of the venous system.

It causes a rise of temperature when inhaled in small quantities, by the increased amount of blood in the arterioles causing an increased tissue change in the body.

In large doses (inhaled) it produces a fall of temperature.

It also helps to produce recovery from the chloroformic insensibility by raising the temperature, which is always lowered by chloroform, and by removing the paralysis of the heart due to chloroform; this action is well seen by the nitrite of amyl making the heart beats fewer and its sounds louder.

Death is caused chiefly by paralysis of the heart, which is shown by all its cavities being distended, and by engorgement of the venous system.—*Druggists' Circular*, March, 1880.

MAN'S APPEARANCE ON THE GLOBE.—The eminent geologist and naturalist, Prof. Dana, of Yale College, says, in a recent letter on the subject of his teaching of evolution:

"I endeavor to show that man's physical nature, as well as his spiritual, was not a product or edict of evolutionary processes; but that it demanded for its creation a divine act, referring for proof, as done by Wallace, to the fact that the brain of the lowest race of men, has twice the cubic contents of the highest man ape; to the fact, further, that the skeleton of man is adapted throughout for a vertical position, and that of the ape for a horizontal or inclined; and that geology has discovered no human remains in the rocks, that indicate a lower grade of man than now exists, or one that makes the first shade of approximation to the inclined structure of the ape, and also to the existence of a moral sense, etc.; all showing that some other power than nature's was required for man's existence.

"I also argue that the facts from science, thus far ascertained, sustain strongly the view, that the introduction of life, on the globe, demanded divine intervention, and that there may have been divine intervention, for all that science has to say on the subject, in other cases, in the grand system of progress.

"I observe, further, that creation of species, by divine fiat, does not necessarily imply creation out of dead matter; but that creation of species from species, would be as strictly creation by a divine act; and of the two methods, the latter would be, most probably, the true one, in view of the economy of action under God's laws."—*Med. and Surg. Report.*, Feb. 7, 1880.

HOW THEY COOK RICE IN JAPAN.—Only just enough cold water is poured on to prevent the rice from burning to the pot, which has a close-fitting cover, and is set on a moderate fire. The rice is steamed, rather than boiled, until it is nearly done; then the cover of the pot is taken off, the surplus steam and moisture are allowed to escape, and the rice turns out a mass of snow-white kernels, each separate from the other, and as much superior to the soggy mass we usually get in the United States, as a fine mealy potato is to the water-soaked article.—*American Grocer.*—*Druggists' Circular*, March, 1880.

THE TONGUE IN MALARIAL AFFECTIONS.—At the last meeting of the Medical Society of Delaware, Dr. Wm. Marshall exhibited some drawings showing a condition of the tongue, he believes pathognomonic of malaria. The middle of the tongue is coated with a dirty, brown fur, which thins off toward the point, where the color of the papillæ can be seen pressing through the attenuated coating, while on the side of the fur there are clean, smooth, depressed margins, having a bright red color. The sides or edges of the tongue are flattened, pinkish, and traversed by sharp lines, creating the impression to the eye of the observer that the parts are crenulated, striated, corrugated, puckered or crimped—either term having a shade of appropriateness—but which, upon close inspection, will be found situated in the substance of the tongue, leaving the mucous membrane even and smooth to both sight and touch.—*Med. and Surg. Report*, Jan. 17, 1880.

TYPHOID FEVER.—Many cases of typhoid fever have been treated. Dr. Jacobi said that it was not infrequent for cases of typhoid fever, in young children, to pass through their course without being detected. If the parents were careless, they would suppose that the sickness was of no special importance, and moreover, the attendant might consider that he was dealing with some of the gastro-intestinal diseases of children, or undefined form of fever. Diarrhea was not a reliable guide; and in proof of his statement, Dr. Jacobi presented a specimen, showing perforation, which had been taken from a young patient that died in his wards at Bellevue Hospital, of typhoid fever. There was no diarrhea during the course of the disease.—*Med. and Surg. Report*, Jan. 3, 1880.

SMALL CALCULI may be readily removed, according to M. le Dr. Mercier, by making the patient lie upon the belly when the small calculi fall by their weight into the anterior portion of the bladder. He is then to place himself gently "as upon four feet," and urinate in that position, when the calculi which have not had the opportunity to fall back into the cul de sac behind the prostate, are passed in the act of micturition.—*Le Progrès Médical*, Feb. 7, 1880.

PEPSIN and Pancreatin cannot be combined in one preparation so as to preserve the active properties of both, since pepsin acts only in acid and pancreatin only in alkaline solutions.

BYASSON, quoted by Flint, says that the proportion of sulphuric acid excreted, is more than doubled by mental exertion, while the proportion of phosphoric acid is increased by less than one-third; so that if it is proper to give free phosphorus to supply the waste, why should we not give free sulphur also? Mrs. Wackford Squeers may have been a better therapist than she knew, when she supplied the waste of nervous tissue, in her unfortunate pupils, with the weekly dose of brimstone and treacle.—*Boston Med. and Surg. Journal*, Jan. 15, 1880.

ELIXIR OF PEPSIN AND BISMUTH is, at best, an unstable preparation, but the responsibility for its use resides with the physician. All that the pharmacist can do, is to state to him the incompatibility of its ingredients, and then, if he still demands it to supply him with the best preparation his skill can produce.—*Druggists' Circular*, March, 1880.

CONDENSED BEER is now made on a large scale in London on much the same plan as condensed milk. Beer is condensed in vacuum pans to one-sixth or one-eighth of its bulk, and then the quantity of alcohol which it originally contained is added. Lastly it is put up in sealed cans.—*Ibid.*

PUBLIC HEALTH NOTES.

THE death rate in London, was unusually high, through the month of February, and during the week ending February 7, reached the extraordinary figure of 48.1 per 1,000. This high rate of mortality is attributed to the combined influence of fog and cold.—*Medical Times and Gazette*, Feb. 14, '80.

THE death of Rev. Henry A. Moule, the English clergyman, whose name is closely identified with sanitary reform, is announced at the advanced age of seventy-nine. He is known as the inventor of the dry-earth closet, which bears his name, and was the author of several pamphlets on drainage and water supply.

A MODIFICATION of the Moule plan of dealing with excreta is suggested by Mr. Geo. Barnard, who proposes to solve the difficulties of the sewage question by the introduction of a system which he calls the Earth Column.

The plan is to separate the liquid from the solid sewage by a series of filtrations through earth, which would have the effect of passing off the former to the sewers in a nearly purified state, and of retaining the latter in a fit state to be employed for agricultural purposes. The idea is an ingenious one but its practicability is not yet fully established.—*Medical Times and Gazette*, Feb. 14, '80.

THE cost to the Russian Government of suppressing the plague, which appeared in such threatening form within its frontiers more than a year ago, is estimated at \$200,000; the cost being computed from January until April. Among the items of expenditure are: Sanitary cordon and quarantines, \$20,000; watching and isolating suspected places, \$12,000; medical staff and employes, \$5,000; medicines, etc., \$18,000.—*Lyon Médicale*.

A CONSIDERABLE degree of uneasiness is experienced in London, and in English provincial towns, over the rising mortality rate from small-pox, and the question is asked, if it is not possible for the various parishes and sanitary authorities immediately to meet and consider whether all is being done that can be in arrest of the development of the epidemic. It may not yet be too late—though it certainly soon will be—to prevent a great outbreak of the disease.—*Lancet*, Feb 21.

THE first annual report of the National Board of Health has made quite a favorable impression abroad, as is shown by the appreciative comments of the *Lancet*, and the London Medical press generally. They commend the results attending the many labors of that body during the year, and the *Lancet* says in this connection: "But even the vast amount of work here indicated seems, scarcely to make an impression upon the apparently inexhaustible energy of the Board; and with respect to quarantine, it may be briefly said here that the National Board of Health gives to the United States a body which is enabled to discuss the subject adequately in its international relations."

THE ravages of diphtheria in Russia appear to be increasing rather than diminishing, and in certain districts it is assuming pestilential proportions. In Kharkoo the medical faculty urge the isolation of the sick, the abandonment of infected houses by both sick and well, the establishment of free hospitals and houses of refuge, the burning of all infected clothing, and advise that religious ceremonies such as communion, burial, etc., be attended with precautionary measures against dissemination of contagion.

The epidemic is now penetrating into Poland and is making itself severely felt in the gymnasia of that country. Sanitary detachments are being formed by the Red Cross Society, for the relief of the stricken districts. During the first twelve months of the outbreak, it attacked 29,765 persons, and killed forty per cent. of that number. In some localities the child population under the age of ten years has been annihilated. A mortality rate of sixty per cent. is not uncommon, and in some instances has reached even eighty-five per cent. M. Kapoustine, in a communication to the Sanitary Committee of St. Petersburg, claims that the appearance of diphtheria is nearly always preceded by disease among cattle, and he suggests that all milk should be boiled before being consumed.—*Medical Times and Gazette*.

THE annual pilgrimage to Mecca which always gives rise to uneasiness among European Governments has just terminated without untoward occurrence. This result seems to be due to the fact that the pilgrimage this year coincided with the cold season (the period of the festival advancing a month each year) but when it is found coinciding with warm weather, danger of epidemics will be greater than ever. To convey an idea of the number of persons who make the journey to Mecca it may be said that 42,000 pilgrims passed by Mount Ararat, December 14th, to Djeddah, a port on the Red Sea, and 20,000 to Suez on the twelfth of the same month, all being in good health. No sanitary precautions are observed, in spite of stipulations to the contrary, and the valley of Mina, wherein the pilgrims pass three entire days in order to make their sacrifices, abounds with remains of animals and filth of every kind. Mecca, likewise, presents a most unsanitary condition, and the approaches to the Grand Mosque are so befouled that the pilgrims who

pass around it, according to the accustomed rite, plug their nostrils with a kind of perfumed wadding.—*Union Médicale, Medical Times and Gazette*, February, 7.

CONVENTION OF VITAL STATISTICS.—The National Board of Health requests that all who are interested in vital statistics and especially those who are charged with the duties of state or municipal registration, will meet with it in Washington, on the 6th of May next, for the purpose of considering the best methods for the collection and publication of such statistics. This convention will consider more especially mortality statistics, for which it is extremely desirable to secure more uniformity than exists at present in nomenclature, in nosological arrangement, and in the forms of tables or graphic representations intended to show the relations of causes of death to locality, meteorology, sex, age, nativity, occupation and birth-rate.—*Med. Gazette*, March 20, 1880.

OBITUARIES.

It is with sorrow that we announce the death of another of our number. On the 18th of March, DR. THOMAS SCOTT departed this life. He had suffered from eczema for a long time, and the exhaustion attendant upon his illness, resulted fatally. He was a native of Ireland, was graduated from the Missouri Medical College, in 1862, and at the time of his death was sixty years old.

Appropriate resolutions, upon the announcement of his death, were adopted by the St. Louis Medical Society, of which he was a member. He stood well in the profession, and leaves a large circle of friends.

DR. JNO. J. McDOWELL, Professor of Anatomy in the St. Louis Medical College, died at Hot Springs, Ark., Friday, March, 26. He was thirty-six years old, and unmarried. A fuller obituary notice will be published in our next issue,

SIR DOMINIC CORRIGAN, M. D.—This well-known Irish physician died Feb. 1, at his residence in Dublin, in the seventy-eighth year of his age. Sir Dominic Corrigan was a noble example of what professional honesty, and scientific devotion can accomplish for a man. To American physicians he will be chiefly remembered, by his classical articles on Permanent Patency of the Aortic Valves, called by Travesseau "Maladie de Corrigan," Cirrhosis of the Lung, and his lectures on Fever.

DR. H. H. TOLAND, Professor of Surgery in the Medical Department of the University of California, whose "Lectures on Practical Surgery" was reviewed in the March number of the *COURIER*, died suddenly, Feb. 27.

DR. LEMAIRE, who, under the name of phenic acid, first introduced carbolic acid as a therapeutic agent, has recently died at the age of seventy-four. He was formerly chief of clinic, in the service of Prof. Bouillaud.

LOCKHART CLARKE.—Dr. J. A. Lockhart Clarke, the distinguished investigator into the pathology of the nervous system, recently died in the sixty-fourth year of his age.

SOCIETY MEETINGS.

THE LINTON DISTRICT MEDICAL ASSOCIATION will hold their ninth annual meeting in the city of Mexico, Missouri, on Tuesday, April 13, 1880.

THE TWELFTH CONGRESSIONAL DISTRICT OF MISSOURI MEDICAL ASSOCIATION will meet at Edina, Missouri, on Wednesday, April 28, 1880.

THE ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY will hold their next meeting at the house of Dr. Engelmann, 3003 Locust street, Thursday, April 15.

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA will hold their next annual meeting in the city of Huntsville, Ala., Tuesday, April 13, 1880.

THE ST. LOUIS COLLEGE OF PHARMACY graduated a class of twenty-six members with the degree of "Ph. G." The Commencement Exercises were held at Germania Hall, Tuesday evening, March 16, 1880. This was the fourteenth class that has graduated from this College.

THE TEXAS STATE MEDICAL ASSOCIATION will hold their next meeting at Brenham, Washington County, Texas, Tuesday, April 6, 1880.

THE MEDICAL SOCIETY OF THE STATE OF TENNESSEE will be held at Knoxville, Tennessee, April 6, 1880.

MORTALITY TABLE.

FOR THE FOUR WEEKS ENDING MARCH 13th, 1880.

CITIES.	ESTIMATED POPULATION.	DEATHS.	DEATH RATE PER 1,000.
New York.....	1,097,563	2,130	25.2
Philadelphia.....	901,380	1,264	18.2
Brooklyn.....	564,448	850	19.
Chicago.....	537,624	701	16.9
St. Louis.....	<u>500,000</u>	<u>471</u>	<u>12.2</u>
Baltimore.....	400,000	526	17.
Boston.....	375,000	612	21.2
San Francisco.....	300,000	361	15.6
Cincinnati.....	280,000	326	15.1
New Orleans.....	210,000	362	22.6

ST. LOUIS COURIER OF MEDICINE

—AND—

COLLATERAL SCIENCES.

VOL. III.

MAY, 1880.

No. 5.

ORIGINAL ARTICLES.

NEURALGIA OF THE TESTIS.

BY WILLIAM A. HAMMOND, M. D., *Surgeon General U. S. Army, (retired), Professor of Diseases of the Mind and Nervous System in the University of New York, etc.*

[Read before the New York Neurological Society, May 4th, 1880.]

FORTUNATELY neuralgia of the testis is not a very common affection. It derives its importance therefore, mainly from the suffering it produces, and the obstinacy with which it ordinarily resists treatment.

Writers upon diseases of the testicle, while laying great stress on the terrible agony which those affected with the morbid condition in question are compelled to undergo, and lamenting the almost hopeless prospect of relief, pass the subject over with but few other remarks. Thus Curling¹ gives only four pages to its consideration, Mr. Humphry²

1 "A Practical Treatise on the Diseases of the Testis," etc. American edition. *Philadelphia*: 1856; p. 303.

2 Article on "Diseases of the Male Organs of Generation," in Holmes' *System of Surgery*.

dismisses the matter in a dozen or so lines of his excellent monograph, and Erb¹ does not even mention it.

Anstie² declares that he has never seen neuralgia of the testis as an independent affection, except from one of these causes: As a reflex effect of severe *herpes preputialis*, as a symptom of calculus descending the ureter, and as a consequence of excessive masturbation. Though probably they are among the most common causes, syphilitic infection is, according to my experience, much more so than either of those named by Dr. Anstie.

The question very naturally arises: What is neuralgia of the testis? Many authors fail to see any difference between it and the "irritable testis" of Sir Astley Cooper. But, that the distinction between the two is very clear, appears to me to be a matter of no doubt, and has been strongly insisted upon by Curling. In fact, careful observation and consideration of the symptoms of the two affections, show that they have very few points in common. In the one there is a permanent condition of hyperæsthesia; the slightest touch produces agony, and even the contact of the clothes is insupportable. In one case which came under my observation, the patient could not endure the dropping of ice cold water, which fell on the scrotum, from a height of only two or three inches; and in another a current of air blowing upon the parts, through an open window, on a summer's day, as the patient lay on the bed, was unendurable.

That there are remissions in the intensity of the morbid sensibility, is very true, but so long as the disease lasts, there is more or less hyperæsthesia, and never a distinct intermission.

In neuralgia of the testis, however, the paroxysms are distinctly marked, and in the intervals there is entire freedom from pain. Even when they are at their height, though a light touch may excite an increase of pain,

1 Krankheiten des Nervensystems. Ziemssen's Handbuch Zwölfte Band.

2 Neuralgia and the Diseases that resemble it. New York, 1872, p. 78.

steady and even forcible pressure, so far from aggravating the suffering, actually mitigates it, and may even, as I shall presently show, abolish it altogether. In "irritable testis," there is no pain so long as the part is kept entirely free from exciting causes. The testis, as it were, possesses a morbid capacity for experiencing pain. In neuralgia of the testis, on the contrary, the pain, though capable of being aggravated by various circumstances, is nevertheless to a great extent, independent of them. Finally, "irritable testis" is rarely of long duration, either ceasing spontaneously, or yielding sooner or later to treatment; whereas neuralgia of the testis is ordinarily among the most obstinate of affections, even castration rarely being productive of relief.

Again, some authors regard the disorder under consideration, as being simply a lumbo-abdominal neuralgia, and still others, as being a disease of the sympathetic nerve. Thus Cohen¹ embraces it among his vasomotor neuroses, in which he is followed by Fontarce,² who, however, seems to be unaware of the existence of any other affection of the testes, chiefly characterized by pain, than Sir Astley Cooper's "irritable testis."

On the other hand, Eulenberg and Guttmann,³ though also confounding the two affections, and considering them under the head of "Hyperæthesia of the Spermatic Plexus," declare that "authors in describing such obscure groups of symptoms, have adduced nothing that would warrant us in localizing the seat of these affections in any sharply defined part of the sympathetic system, and physiology and pathological anatomy certainly furnish us with no adequate grounds for so doing."

The present paper, however, is not devoted to the consideration of any such questions. It is purely of a clinical

1 "Des Névroses vaso-motrices" Arch. Gén. de Méd. 411, 1863.

2 Pathologie clinique du grand sympathique. Paris, 1880, p. 78.

3 Physiology and Pathology of the Sympathetic System of Nerves. Translation by Napier, London, 1879, p. 129.

character, and has reference to two cases of neuralgia of the testis, which have quite recently been under my care, and which were successfully treated by means not hitherto, so far as I am aware, employed in the affection. Other cases of the disease had been under my charge, but except in those of a syphilitic character, no great degree of success had followed the therapeutic measures adopted. I had succeeded, as had others, in relieving the pain, by hypodermic injections of morphia, but the influence was only temporary. I have never performed castration for the disease, and I am decidedly of the opinion—bearing in mind the experience of those who have performed it—that the operation is entirely unjustifiable, unless the neuralgia is clearly associated with, or results from some morbid condition of the testicle, and even then the measure I have to propose, should be first fairly tried.

Thus Curling¹ states that Sir William Blizard extirpated a testicle, on account of neuralgia, which, upon examination, was found to be perfectly healthy. The same author cites a case occurring in the practice of Mr. Russell, of Edinburgh, in which castration was followed by cure, but in another instance of like character, the patient lost his testicle, but continued to suffer from the disease as badly as before the operation. Sir Astley Cooper, extirpated the testicle three times for the disease in question, and with satisfactory results, but in all of these, as Curling points out, the organ was manifestly the seat of disease.

Macculloch² refers to a case of neuralgia of the testis which, having lasted a long time, and entailing great suffering, castration was decided upon. The operation was performed, and without the least beneficial effect, for the cord became the seat of the pain, and the agony was as great as ever before.

I know of no surgeon of the present day who advocates the practice in question; and, certainly, if the results I am

¹ Op. cit. p. 304.

² Essay on "Marsh Fever and Neuralgia;" London, 1828; p. 77.

about to detail are not altogether exceptional, no excuse for castration in neuralgia of the testis exists. The procedure which I have to recommend, is based only on two cases, but the relief afforded in each of these, was so prompt and decided, that I venture to bring it before the medical profession, that other trials may be made. Several years may elapse before another case of the disease comes under my observation. Till these two instances of the affection, I had not witnessed one for over three years.

Case I.—I. H. B., a gentleman aged 47, consulted me March 15th, for neuralgia of the right testis, from which he had suffered more or less severely, and with but few and short intermissions, for over fifteen months. He admitted that the affection was originally, in all probability, induced by excessive venereal indulgence, but insisted that since the inception of the disease, he had been extremely temperate in this direction. Indeed the facts that the pain was always aggravated, and paroxysms generally induced by intercourse, operated as an effectual prohibition against extreme, or even moderate gratification of the sexual appetite. There was no evidence of syphilis.

The pain was of a sharp, lancinating character, not confined to the testicle, but extending up the cord as high as the external abdominal ring. The cremaster muscle was, during the continuance of the paroxysms, the subject of strong spasms, which added greatly to the agony of the patient. Walking increased the pain, and sometimes brought on a seizure, but firm pressure afforded some relief, so that when he had the opportunity, he sat with his hand firmly squeezing the right side of the scrotum.

As, previous to his consulting me, every medicine theoretically capable of giving relief had been tried; as he had been electrified, galvanized, faradized and magnetized, without benefit; as he had been subjected to anti-malarial, anti-syphilitic, anti-rheumatic and anti-gouty treatment in vain; as local applications of hot water had been prescribed by one surgeon, powdered ice by another, the actual cautery by a third, cutting for a supposed stricture by a fourth; as

he had been blistered, "unguented," iodinated, etc., etc., and all to no effect,—nothing giving any relief except morphia, hypodermically administered, and as the effect of this had been but temporary, I felt warranted in expressing an unfavorable prognosis. I think most of my professional brethren would have been, as I was, almost hopeless of effecting a cure.

It struck me however one day as I was applying pressure to the facial nerve of a patient for the purpose of stopping histrionic spasms, that possibly the neuralgia of Mr. B—— might be arrested by like means applied to the spermatic cord so as to compress the nerves. I reflected further, that in those cases of motor paralysis caused by pressure, such as in those instances in which the axillary plexus is compressed during sleep by the patient's arm falling over the back of the chair, there is always more or less anæsthesia produced; and, still further, that the stretching of a nerve for neuralgia, an operation I had several times performed with success in cases of sciatica, caused physical effects upon the tissue of the nerves strictly analogous to those induced by pressure. I also called to mind Breschet's operation for the radical cure of varicocele in which the cord is subjected to strong pressure for the purpose of obliterating the spermatic veins.

Not having at hand Breschet's apparatus, I took one of the little wooden test-tube holders which are sold by the chemical apparatus dealers, for a few cents, and by slightly modifying it so as to give a little more room between the blades, and placing another India rubber band around it, so as to increase the pressure about double, I had a piece of mechanism well adapted for the purpose I had in view.

On the 16th of March, while the patient was suffering from a severe paroxysm, I smoothed out the folds of the scrotum and applied the instrument so as to compress the cord as high up as possible.

So far from its adding to the pain he was suffering, the immediate effect was a decided mitigation. In the course of about two minutes, a different kind of pain began to be

experienced at the point where the apparatus was applied. This now extended upwards into the abdomen, and downwards into the testicle. It increased in violence till finally at about ten minutes after the application, the patient exclaimed, that "the remedy was worse than the disease," and that nothing would induce him to endure it longer. Believing that the pressure exerted was not sufficient for the object in view, I added to it by squeezing the blades together with my fingers. At once the pain stopped. The patient felt nothing but a tingling sensation apparently throughout the right side of the scrotum, and this rapidly diminished. Pricking the skin of that side failed to cause any pain, and the touch of the finger was not felt; ten minutes had now elapsed; I ceased to press with the hand, but continued the application of the instrument for five minutes longer; there was no return of the neuralgic or other pain; I directed the patient to remain in bed till I should see him again, six hours afterwards; at that time (8 p. m.) there had been no return, and up to the present date (April 25th) he has remained entirely free from all pain, the longest period of complete absence from neuralgia which he has experienced since the beginning of the disease. Sensation has returned to the scrotum and testicle, and there are normal erections and sexual desire.

Case II.—I. T——, age 38, consulted me March, 17th, for neuralgia of the testis, from which he had suffered since December 26, 1879, with but two distinct intermissions, though there were occasional periods during which the pain was less than at others. At the time he came under my observation his suffering was particularly acute. In this case, according to his statements, there were no reasons for suspecting excessive sexual indulgence or syphilitic infection as the cause. Apparently it was due to exposure to cold winds while rather lightly clad on Christmas night. He had been awakened the next morning by the first paroxysm.

On examination, I found that the right testis was, as in the other case, the seat of the disease, and that the pain extended up the cord and into the abdomen. Walking, sit-

ting or standing, aggravated the suffering, and only by lying down on his back did he obtain any marked alleviation. He had found out for himself, however, that a suspensory bandage gave some relief from the intense pain produced when he walked or even stood erect, but beyond this, no means of treatment except the use of opiates had been of the slightest benefit. One eminent surgeon of this city had suggested castration, but others had strongly advised against it. When the patient came to me he had already consulted over a dozen medical gentlemen besides several *chالاتان*s. He informed me that one of the latter had temporarily relieved the pain by suppositories of opium and belladonna, but in a short time these entirely failed to give any amelioration. He was particularly anxious to get my opinion in regard to the advisability of castration, for, being almost in despair, he had nearly come to the determination to have the operation immediately performed.

As I have said, so far as the patient's antecedents were concerned, careful inquiry led to no suspicion of specific disease, neither were there any evidences of such a condition. I could not ascertain that any marked neurosis had existed in any member of his family. He had been married for about five years and had two healthy children. Since the inception of the malady, venereal desires had almost entirely ceased, and erections, such as those caused at night by lying on the back, or by distension of the bladder, added greatly to his suffering.

On the afternoon of the 17th of March, I applied pressure to the cord by means of an apparatus similar to a lemon-squeezer, but so arranged that the blades could be brought closer together or separated by means of a screw passing through them. In this way the pressure could be more exactly adjusted than by the elastic bands used in the previous case, and could, moreover, be rendered much greater, as occasion might require.

Profiting by the experience derived from the first case, I compressed the cord strongly at first. There was some little local pain, chiefly, so far as I could judge, in the skin of

the scrotum, but the pain in the testicle was almost immediately arrested. After five minutes had elapsed, I separated the blades so as to allow the circulation to be resumed, but in five minutes tightened them again; I now adjusted them after another five minutes of strong pressure, so as to permit the circulation to go on, but yet exert considerable force upon the nerves, and while thus arranged, the patient fell asleep, the first undisturbed nap, as he explained to me, that he had had since the beginning of the disease.

When I saw him in the evening, four hours after the application, he had just waked up; I removed the instrument and since then to this date (April 25th) there has been no pain.

For several days afterwards, the testicle seemed to be numb, but this insensibility is evidently gradually disappearing.

Relative to the effects of pressure upon nerves, a good deal of valuable information might be brought forward from the writings of Waller, Bastian and Vulpian, Mitchel and others. At some future time I propose to adduce some of my own experiments and observations relative to the influence of pressure as a curative agent for other neuralgias. I believe it has been applied to branches of the fifth pair in neuralgia of the face, but I am unacquainted with any definite reports as to its value. It is mentioned by Erb in "Ziemssen's Handbook" very casually, but Anstie and other authors do not refer to it.

To be effectual in relieving the pain of a neuralgic testis, the pressure must be strong enough to break up the axis cylinders of the nerves. If less than this, the pain will be aggravated; doubtless in time the nerve is restored to a state of integrity. How long a period is required for this purpose cannot yet be determined from the two cases occurring in my experience.

Another point remains to be considered, and that is, does the operation lead to atrophy of the testicle?

In reality this is not a question of the very first importance so far as the interests of the patient are concerned,

for one good testicle will serve him better without its neuralgic fellow, than with it. But the question is important in other relations, and there may be cases in which both testicles are neuralgic, and then it becomes a primary consideration.

I suppose, that if the spermatic nerve were irreparably injured by the pressure, atrophy would ensue. The experiments of Obolensky¹ on rabbits go to show, that if the spermatic nerve be divided, the corresponding testicle progressively wastes away, and in a case of fatty degeneration of this nerve occurring in a man, the testicle of the same side was atrophied, and there was also a nucleus of softening in the gray substance of the cord. It is probable, however, that this "nucleus" was at once the starting point of the degenerative processes both in the nerve and testicle.



TIME OF CONCEPTION AND DURATION OF PREGNANCY.

BY GEO. J. ENGELMANN, M. D., *Fellow of the American Gynecological Society; Fellow of the London Obstetrical Society, etc.*

IT is not often that we can positively trace conception to a single, and, moreover, a *first coitus*; I deem it accordingly of sufficient interest to relate three cases, recently seen by me, in which we can satisfactorily determine the duration of pregnancy, the coincidence of impregnation and insemination, and the time of conception in its relation to the menstrual period.

It is with reference to this latter point that these cases were most especially interesting to me, as establishing by

1. Zeitschrift für rationn. Med. B. 32, Heft. 2, 1868, cited by Vulpian in *Leçons sur l'appareil vaso-moteur*, t. ii., 1875; p. 392.

clinical facts the correlation of ovulation and menstruation, which I have anatomically demonstrated some years ago,¹ and have recently verified by two exquisite specimens.

I have, in private and hospital practice, frequently met with the victims of seduction, and have occasionally heard the history of conception following a single intercourse, submission being obtained by persuasion or force, but have never before seen a case in which careful inquiry has so fully satisfied me of the truth of the statements made, as in the cases here reported. The facts to which I shall refer are gathered from the clinical histories of three sensible and respectable, but unfortunate girls; two of whom I confined on the second of March, whilst the third consulted me on the following day.

I have every reason to place full reliance upon the statements made, on account of the confidence shown me in all matters by the patients as well as their families; frequent questioning and cross-questioning has always elicited the same facts, and the truth of the most important history, (Case I.) I was again assured of by the suffering girl shortly before she succumbed to a septic peritonitis.

Case I.—Patient is an educated lady, 22 years of age; physically well developed, but nervous and troubled with menstrual irregularities; the intermenstrual period varying from four to six weeks.

The last menstrual flow appeared on the 28th of April; while on a visit five weeks later, on the 4th of June, as she was expecting the next period, she yielded to the seducer, with whom she had connection but once, as she returned to her home soon after. The expected flow did not appear; a normal pregnancy followed; on the 2nd of March, 272 days after impregnation, she was confined, and early on the 3d delivered of small but healthy twins.

Case II.—A well developed and unusually healthy young lady of 24 years yielded, for the first time, on the 4th of

¹ Engelmann. The Mucous Membrane of the Uterus. *Amer. Jour. of Obstetrics*, May, 1875, p. 18-21.

July; as she has never been regular, she is unfortunately not able to recall the date of the last sickness previous to this, her first coitus; however that may be, she never menstruated after it; and had connection but once more toward the end of July, at least three weeks after the first.

This patient was also confined on the 2nd of March, 242 days after the first intercourse, and was delivered of a fine healthy child, which, with but a few trifling differences bore all the characteristics of a child at term.

Case III.—On the 3d of March I was consulted by a girl of 24 years, daughter of a farmer, who, to all appearances seemed to be in the eighth month of pregnancy; the fundus uteri a hand's breadth above the navel, the navel protruding, ballotement distinct. Patient had menstruated last about the middle of July, and had yielded for the first time during the last days of the period, before complete cessation of the flow; connection was had but once at this time, and, although indulged in very frequently afterward, opportunity did not again offer for almost a month, which would have allowed time for the recurrence of the menses had not conception taken place, and, judging from the development of the uterus and the position of the fetal head in the pelvis, gestation must have continued well over seven months and impregnation must have taken place during the last days of the menstrual flow.

The facts to which I desire to call attention are:

1. That conception accompanied defloration; in each of these cases the first intercourse proved fruitful.
2. That impregnation and insemination must have been simultaneous.
3. That conception occurred in one case (I.) just before the appearance of the catamenia, and in another (III.) during their continuance.
4. The duration of pregnancy was limited to 272 days, and in the case of premature labor (II.) just one month less, 242 days.

1. As a rule, the first coitus is not a fruitful one, but in the three cases above mentioned, conception followed the

defloration; in Case I. this is evident, but might seem questionable in Cases II. and III. did we not not have the best proofs to the contrary; Case II. was confined eight months, 242 days after the first intercourse, of a healthy, well developed child, which might well pass for a child at term; thus impregnation must have occurred consequent to the first intercourse and simultaneously with it; it could not possibly have resulted from the second coitus which took place three weeks later, and would have reduced the period of gestation to seven months, an impossibility, as the child was so fully developed that it could not be less than eight months old.

A similar reasoning applies to Case III; the development of the abdomen was at least that of seven and one-half months, so that conception must have taken place at the first intercourse, and could not possibly have resulted from the one next following, which took place a month later; moreover the menstrual flow did not return after the first intercourse.

2. With regard to the second point, that impregnation immediately followed insemination, there can be no doubt, for the reasons already mentioned above; and again, in Case I, it could not be otherwise. As a proof of conception having taken place at once, after intercourse, the menstrual flow, which was hourly expected, did not appear.

3. The occurrence of conception, in Case I. just before the coming of the menses, and in Case III. toward the close of the period, during the continuance of the flow, is, to me, a clinical proof of the temporal relation between ovulation and menstruation, which I have again and again anatomically demonstrated, and find verified by every fresh specimen which I am enabled to examine..

The ovary shares in the congestion which invariably involves all the sexual organs of women during the menstrual period, and culminates in the rupture of the Graafian vesicle, and the discharge of a bloody fluid from the uterine mucosa, the menstrual flow; this is the climax, the depletion or outlet for the preceding congestion—the only symptom visible to us, and hence spoken of as menstruation.

Cases I. and III. serve admirably to demonstrate the truth of both of the opposing theories, each of which is so warmly maintained by its advocates, namely, that the ovum impregnated is the one developed for the period expected, belonging to the coming flow, (*Loewenhardt Archiv. f. Gynecologie*, 1872, iii, p. 456), which of course does not occur on account of impregnation; and that the ovum impregnated is the one developed at the last catamenia preceding the conception.

In Case I. the former theory holds good, and in Case III. the latter. The time of impregnation is the important and mostly unrecognized factor.

In Case I. impregnation took place during the menstrual congestion, just before the coming of the flow. The ovarian follicle was upon the point of bursting, and in the nervous excitement, and the additional congestion accompanying sexual intercourse, it was somewhat prematurely ruptured, as is not unfrequently the case.

In Case III. the ovum had already escaped from the follicle and was ready to be impregnated.

Anatomically I have found that the rupture of the Graafian vesicle generally occurs soon after the first day of the flow; thus in the specimen recently shown to the St. Louis Medical Society, by Dr. Briggs, (*St. Louis Med. and Surg. Jour.*, Mar. 20, 1880, p. 265); death from pulmonary hemorrhage on the third day of the catamenia, the fresh coagulum in the ovary gave evidence of recent rupture. In another specimen examined by me since then, death from traumatic peritonitis, on the fourth day after the appearance of the flow, a recent coagulum testified to the same condition.

4. With regard to the duration of pregnancy, Case I. can alone be considered, although it is extremely interesting to see that Case II. who conceived just one month later, on the 4th of July, (case I. on the 4th of June,) should be confined on the same day, the 2d of March.

In case I. the ovum was carried to full term, 272 days, a few days short of the ordinarily accepted period of ges-

tation; the approach of labor pains being probably somewhat hastened by the intense anxiety and the mental strain under which the patient was laboring.

The duration of ordinary pregnancy, is placed at from 274 to 280 days, averaging about 278 days, whilst after single coitus, if we may follow Leishman, who quotes Dr. Reid—43 cases of single coitus—it is but 275 days; the time of gestation ranging from 260 to 300 days. Leishman himself cites one case of 273 days.

I could trace no exciting cause for the occurrence of premature labor, in case II.; it came on at the end of the eighth month of pregnancy, 242 days after conception, and here, as well as in labor at term, the monthly period seems an important factor. The time for the recurrence of the catamenia seems to be the term at which the ovum is expelled.

The remarks I have made, have been merely deductions from the cases before us, and with reference only to them, as I would not venture to generalize upon so narrow a basis.

THE PROPRIETY OF SURGICAL TREATMENT OF MALIGNANT DISEASES OF THE UTERUS.

BY G. A. MOSES, M. D.

[Paper read before the St. Louis Obstetrical and Gynecological Society, Feb. 18, 1880.]

THE subject to which I desire to invite the attention of the Society is one which, within the last few years has compelled my frequent consideration. From the facts of its insidious approach and deadly character, so unyielding and unforgiving, the medical man, feeling that it is an enemy against which the arsenal of his knowledge contains no adequate weapon, has been prone to stand quiescent, simply pronouncing the doom that nature has already

decreed. Reference even to the recent standard authorities, gives so little encouragement in the treatment of cancerous disease of the uterus, that the practitioner is, as Professor Barker says, "so hopeless of good results that he is discouraged from rendering the constant and assiduous care which may really be of great service to the patient. I shall not at present undertake to open a discussion upon the varieties of malignant disease which are met with by the gynecologist, but confine the discussion to the advisability of surgical procedure in cases of carcinoma of the cervix.

Fortunately, indeed, epithelioma, which is the most frequent form of cancer of this part, is that which is less rapid in its early ravages, less rapid in systemic infection, therefore most amenable to treatment, which if not curative may be so far palliative, as to be often commended.

A scant experience, I confess, urges me to adopt and recommend surgical measures, even in such cases as are hopeless as to final cure, which latter happy result I fear we must continue to despair of, in the majority of instances. Yet I think, (mayhap 'the wish is father to the thought'), that the advance of knowledge encourages us to believe that the boundary line of necessary fatality may be still further removed, and upon many heretofore doomed, a ray of comfort may be shed— "*nos etiam speravimus meliora.*" In evidence that this hope is based upon reported clinical facts, I refer you to a paper by Prof. Fordyce Barker, published in the *American Journal of Obstetrics*, Nov. 1870, page 219, in which are reported many successfully operated cases, gathered from various quarters. Of his own experience, Prof. B. says, "Since 1856 I have ablated the cervix in eleven cases for this cause, (epithelial cancer), nine of which have recovered and remain well." Even in 1870, Dr. Barker did not encourage operations, if the disease passed beyond the boundary of the intra-vaginal cervix; but he also says that there is much to encourage us from the rapid advance in histological knowledge, to hope that we may yet be able to advance also in successful treatment of this

dire disease; "time advances with giant steps, and before we think it possible, things come to light which render the patient labors of active young investigators historical in a very short time."—(*Bilroth's Surgery*, vol. ii., p. 453. *Syd. Soc. Tr.*)

The question which at once arrests the hand of the surgeon is the true pathology of the disease, whether the origin be local or constitutional. If the former, then early recognition and ablation of the neoplasm would of course be imperative; even though lymphatic implication be commencing, the chief focus of disease would be gotten rid of; but this matter is in doubt. Mr. Paget in his classic work upon *Surgical Pathology*, leaves one scarce room to doubt the validity of his hypothesis, that cancers "are local manifestations of certain specific morbid states of the blood," and that the morbid material is the essential constituent of the cancerous diathesis or constitution; but, granting this, the local manifestation is acknowledged to increase the morbid material, for while the amount of useful nutrient a localized cancer will consume, may be of small importance, whatever returns from the cancer to the blood is damaging and destructive.

"While we do not know exactly the derivation of the lymph, nor what its relation to the materials of the part from which it comes, what *we do know* of it, is consistent with the belief that lymph from the seat of specific disease, is likely to contain such of the materials of the disease as may either be carried to the blood, or may be organized in the lymph after the same plan as in their primary seat." Again, "The lymphatic glands usually become cancerous in direct succession from the primary disease to the thoracic duct."¹ Thus the position of the local expression of the disease is to an extent, analogous to that of the chancre and syphilis, of the eruption to the constitutional affection in eruptive diseases.

Rindfleisch and Bilroth, like most German pathologists

¹ Paget, *Surgical Pathology*.

of the day, are disposed to localize disease to a very great extent, and thus give strong arguments for surgical attack of pathological sites ; and the apparently fortunate results which occur, encourage the practice.

The absence of constitutional symptoms during the early growth of the neoplasm, particularly the epithelial cancer, while giving grounds for the theory of local commencement, and subsequent secondary infection, must be very carefully considered ; the systemic condition or predisposition necessary to malignant development, is probably existing, only requiring local irritation to incite its rapid development ; and even then in the form of disease we are considering, Paget remarks that the general health is usually good, till it is affected by the consequences of the local disease ; less than ten per cent. of them appear ill at the first observation of the disease, and no primary cachexia can be observed preceding the appearance of the growth.

Sarcoma of the cervix, I have not met ; of the corroding ulcer, or *ulcus excedens*, the *noli me tangere* of old authors, I have seen two examples, one affecting the posterior wall of the vagina, the other attacking the anterior lip of the cervix uteri ; the latter ultimately resulted in death. It is not a true cancer, and has been very thoroughly observed and described by Paget, Hutchinson and others ; beyond the boundary of the disease there are no heteromorphous growths, no lymphatic infection. The fatal case which I observed, occurred in a woman who had never borne children, and was for years addicted to intemperance, which habit could not be overcome, and thwarted all remedial measures. Ordinarily, where such an ulcer is removed or effectually destroyed, recovery is assured. It remains then for us to contemplate, at present, only the epithelial form of disease.

From the valuable statistical tables compiled by Dr. Emmet, that observer concluded that with very rare, if any exceptions, pregnancy has been the rule, and of fifty-one women the average number of pregnancies was double the ordinary. He seems to consider cervical lacerations as the very common exciting cause of the disease. Goodell hints

that even the repeated "insults of coition" may be a sufficient cause; while prolonged local inflammations, cervical catarrh, etc., I have little doubt, are frequently the commencement of epithelial cancer; perverted nutrition and abnormal neurotic conditions will cause, under certain circumstances, perhaps inherent predispositions are necessary, violent departures from ordinary pathological processes. Eczema of the nipples has been observed to apparently induce cancer of the mammary gland.

These premises not only seem to invite surgical interference, but they assuredly render it incumbent upon the practitioner to treat any obstinate cervical inflammation in childbearing women with the utmost care, with a view to rapid and complete cure. Much might fitly here be said upon the best method of treatment of such cases; but another opportunity for the discussion of this important question will doubtless be afforded, but, as a *sine qua non*, uterine repose should be insisted upon.

The indications of incipient cancer are rarely observed or recognized, we have yet to discover such as may be considered unerring points of diagnosis, and usually suspicion is only aroused when the disease has already advanced to an alarming degree, by the presence of hemorrhages, pain, or offensive discharges. Any one or two of these may be absent. I have at present in charge, a case of cancer in the last stage of systemic infection, edema, ascites, total destruction of the cervix, glandular involvement and marasmus, and during the entire history the patient has had no pain at all, and no hemorrhage until within the last month. She has borne twelve children.

If the disease be detected when confined to the intra-vaginal cervix, immediate excision should be the rule, I now believe. At this time, amputation may be made in presumably sound tissue, and although I have not yet done it, I should attempt to follow Emmet's advice, and perform the operation after Dr. Sims' method, covering the stump with the mucous membrane, for the important purpose of abbreviating the healing process; if by good chance adhe-

sions promptly occur, thus diminishing the irritation and fluxion incident to cicatrization by granulation. Where the diseased parts can be thoroughly removed, Paget says that though recurrence is in some cases rapid, in others it is greatly retarded. The number of cases in which recurrence ensues at a medium period, appears comparatively small, and "if a patient remain free for eighteen months, it is very probable that the immunity will continue for *at least* five years.

I think the best method of operation is with the scissors or knife, whenever the disease is clearly confined to the vaginal cervix. While the electro-cautery, as used by Dr. Byrne and others, or the cautery of Paquelin, both do the necessary work without hemorrhage, my objection to them is, that it is impracticable to cover the wound with mucous membrane, and so secure rapid healing; secondly, in case any processes of the disease exists, the charred condition of the stump would prevent their recognition; and so far as hemorrhage is concerned, I have not seen it sufficient, to seriously interfere, and the closure of the wound by the mucous membrane, should effectually arrest it. The *ecraseur* should not be used unless the cervix be previously transfixed, for reasons which will be shown, in report of a case in another part of this paper.

When the disease has passed beyond the "medium period," and has advanced, as it usually does, up the cervical canal, and hemorrhages have become frequent, or alarming in amount, the parts can be best attacked by the curette of Simon or Sims; every portion of the disease being as thoroughly removed as possible, care being taken not to penetrate the peritoneal sac. If such hardened points are met with, as resist the edge of the curette, the site should be seized by tenaculum or volsellum, and excised with properly curved scissors. In the prosecution of such operations, we may meet with very profuse hemorrhages, which may be checked for the moment by sponges, or injection of a stream of hot water; any spurting vessel should be seized by artery forceps. If the pros-

ecution of the curretting be very greatly impeded or prevented, the cautery knife, curved, belonging to Paquelin's cautery, will be of service in completing the destruction of the growth and arresting bleeding.

A precaution to be observed in the use either of the thermo- or electro-cautery, is to carefully avoid bringing the knife or wire to a *white* heat; this cuts so rapidly that the vessels are divided immediately, as with a knife, and bleeding is abundant. The instrument should be kept at *red* heat, so that the parts are *burned* through, and thus contracted and charred, and hardened by coagulation of the contained fluids. In the late edition of Emmet's "Principles and Practice of Gynæcology," page 504, he recommends Paquelin's cautery, because "the platina cone extremity is easily kept at a *white* heat, which is maintained with but little impairment, even in the *midst of profuse bleeding*." If there is "profuse bleeding," then the chief object of the cautery is annulled. It is worse than knife or scissors, as being more troublesome, expensive, and less rapid. The secret and necessity with these instruments, is to preserve simply a *red* heat, as has been repeatedly argued by Dr. Byrne, the inventor of the best electro-cautery I know of. The same directions accompany Paquelin's instrument, but seem to be generally neglected in order to avoid the damage to neighboring parts of the vagina, from radiation, the vagina may from time to time be douched by cold water, as advised by Gosselin. A very ingenious anti-thermic attachment of the Paquelin knives, has been devised by Dr. Wilson, of Baltimore, which, I am told by Dr. Sims, answers the purpose admirably, by keeping the shafts of the instrument cool; the same arrangement might be applied to the electro-cautery instruments.

If the cautery be not used, the cavity, after operation, should be thoroughly packed with styptic cotton, to which a small quantity of glycerine has been added, and thus secured in position, by tamping the vagina with borated cotton; or if this be not at hand, with the best quality of

cotton that can be obtained, into which a small quantity of carbolized glycerine should be soaked. After the removal of the dressing, and indeed before the last portion has been removed, there will be a varying quantity of offensive discharge, which should be removed by frequent injections of hot carbolized or thymolized water.

After the primary operation, the patient should be impressed with the importance of frequent examination, so that the slightest appearance of recurrence may be immediately attacked. Eternal vigilance is the price of restoration to life. Even in an advanced stage, where death seems imminent from hemorrhage or wasting discharge and infection, surgical treatment will often hold out promise of retardation of the fatal termination and avert fetor and hemorrhage.

In October, 1877, Mrs. B——, a widow, aged 37, having had one child ten years previously, was brought to the St. Louis Hospital, apparently at the point of death from hemorrhages which were constant; the cervix was an enormous mass of epithelioma, the uterus somewhat movable, the vagina intact. She agreed to an operation after fully understanding the danger.

Under ether I excised rapidly with serrated scissors, as much of the mass as possible, then with the curette scooped out until it seemed as though another scrape would penetrate through the uterine wall; the hemorrhage was frightful, but she rallied from the operation, which in two months was repeated to a small extent. In October, '78, she left the city greatly improved, able to take short walks, etc. She went to visit a sister at Quincy, Illinois; the disease recurred, nothing was done, and she died during the summer of '79. Her life was prolonged, and comparative comfort secured for nearly two years, and I am satisfied could have been still further secured, had the necessary constant watchfulness been carried out. I suggested to her the removal of the uterus, which has been done for the same disease by Freund and Schroeder, with however such imperfect success as not to encourage the procedure, except in

cases of glandular carcinoma of the cervix, the very class of cases in which the method already mentioned should be sufficient to secure all the immunity that one can hope for. In use of the ordinary ecraseur, a considerable risk is incurred without the precaution of transfixion with large needles above the site of intended ecrasement, *i. e.*, of cutting through the vaginal and peritoneal wall. Such an accident happened three weeks ago to a patient upon whom I assisted Dr. Gregory to operate, the intestines passing into the vagina, through a large irregular rent in the posterior cul de sac; the wound was closed by several silver wire sutures, and at this time the patient has recovered from the effects of the operation, though an ulceration has within the last four days appeared on the anterior wall of the vagina.¹

There occasionally may exist a concomitant condition, associated with malignant disease, which would temporarily contra-indicate operative procedure. I refer to inflammation of the uterine annexes. I have met with one such case, and have it at present under observation; the inflammatory products are disappearing, and I hope yet to be able to remove the diseased portions of the organ. At the first inspection it was impossible to detect the difference between the neoplasm of malignancy, and the surrounding products of inflammation; but as the latter recedes, the former becomes more defined, and what two months ago seemed to be a case rapidly advancing to a fatal termination, gives some promise of becoming an operable case.

The dangers incident to surgical interference, under the circumstances, are of course to be considered, and should be fully explained to the patient. Death may be hastened, but taking into consideration the almost cer-

¹ Since the above paper was read, I have had the opportunity of seeing the patient last referred to. She appears, in every respect, well. The extremity of the vagina presents a healthy aspect. The os uteri is of normal dimensions; the uterus movable. She has had no return of menstruation. March 20.

tainty of death, within three and one-half years from the commencement of the disease, (according to Barker, who allows a longer limit than most authorities), and the probability of much increased longevity with certainty of relief from the distressing and offensive symptoms, I urge the physician to argue strongly for the benefit to be derived, and he will usually find the sufferer willing to submit to his judgment.

TRANSLATIONS.

THE MORPHINE HABIT.¹

BY DR. ED. LEVINSTEIN.

Translated by Dr. E. Evers, St. Louis.

In examining individuals addicted to morphine, I not only found the symptoms usually exhibited by the opium-eater, but also a series of others, not so well known; differences in the pupils; disturbances in the power of accommodation; irregularities in the action of the heart; abnormal respiration; not only apyrexia, but also ravenous appetite and polydypsia. Besides the cerebral symptoms of restlessness, fear, hallucinations, etc., we also find an increased spinal reflex-irritability, (tremor of the hands), moreover, the uro-poetic and uro-genital organs are often seriously involved, as indicated by albuminuria, impotence and amenorrhea. Besides these functional disturbances, of individual organs, we also find febrile conditions, which can be separated into three forms. The first form, morphine-intermittens, has been described before; it presents the same clinical symptoms that malaria-intermittens does; chilly

¹ Lecture delivered before the Berlin Medical Society.

sensations increased to severe rigors, followed by heat and perspiration, sometimes tertian, but most frequently quotidian in type. The temperature in morphine-intermittens reaches the same degree as that of malaria, the intervals are as well marked, and the splenic tumor as large as in malaria-intermittens. We also find erratic fever, and from time to time irregular attacks of chilliness followed by heat and perspiration. Morphine-intermittens is frequently accompanied by great excitement and violent delirium.

In the second form of fever, the patients complain almost daily, generally in the afternoon or evening, of chilliness, moderate increase of temperature and violent thirst; this condition continues for several hours, sometimes for half a day.

The third form of morphine-fever presents all the symptoms of a typhoid condition; headache, vertigo, ringing in the ears; the patients are feeble and apathic; they take to their beds which they rarely leave for from three to six weeks; they are unable to occupy themselves with any work, and complain that they can not read. Examination reveals a paralysis of the power of accommodation, quite characteristic of this form of morphine-fever. The temperature rarely exceeds 38.3 (101°).

All these symptoms depending on chronic morphine-poisoning, disappear at once when the use of morphine is abandoned. The abnormal condition of the eyes and of the digestive organs, the neuralgia and the tremor disappear in a week; the impotence disappears in the third or fourth week; the amenorrhea which may have continued for years, gives way in four to six weeks to the regular return of the menses; the morphine-intermittens disappears at once, both when the use of morphine is stopped suddenly and when it is abandoned gradually.

I have repeatedly discussed the question before you, whether the sudden withdrawal of morphine is preferable to the gradual abandonment of the drug, and have answered the question in the affirmative. Extended observations have convinced me that it is wholly in the interest of the patient if the use of morphine is stopped suddenly.

Besides other disadvantages, the method of gradual withdrawal, labors under this difficulty, that in the last days of a treatment commenced weeks ago, when we are contending against small doses only, say one-half to one grain, we not only encounter the violent opposition of the patients, but the refu-

sal of the last small doses is followed by the same violent symptoms, which, in the method of sudden denial, are overcome in four or five days.

It is unquestionably true, however, that the sudden withdrawal is an extremely severe measure; that sensitive individuals, and especially women, do not bear it well; that the medical supervision must be continuous, and that it is impracticable in individuals suffering with chronic, painful, incurable diseases. The question whether any denial of morphine in the latter class of cases is justifiable should be answered to the effect, that, in all cases in which the duration of life is probably very short, no such treatment should be resorted to, but it is indicated in all cases of chronic painful diseases, in which the duration of life is beyond computation. The reason of this is apparent. Morphine at last fails of its effects, even if the dose be increased. The nervous system is saturated; it is unable, as in the chemical process of saturation, to absorb any more morphine and have it act upon itself. The morphine in the body simply exhibits its toxic effect, but does not ameliorate, much less relieve pain. If we rid the body of this morphine, it returns to its normal condition, in which small doses again produce their narcotic effect.

We deprive this class of patients of morphine, therefore, in order to restore to them a remedy, which, if properly administered, will permanently relieve their pain; but which, if taken improperly, will add to the sufferings of the disease the evils of intoxication.

In this class of cases, I have resorted to a modified form of treatment, also depending upon the sudden deprivation of morphine, and which I have tried successfully in persons suffering with phthisis, emphysema, heart-disease and tabes.

Modified Treatment.

In order to ascertain the quantity of morphine taken daily, the patients are put under observation, for two or three days before the treatment is commenced, and during this time receive the dose which they say they have been in the habit of taking. The injections are then stopped abruptly. According to my observations, in a few cases, especially in persons to whom sufficient attention has not been paid to their nutrition, the symptoms of severe collapse set in before the expiration

of twenty-four hours after the last injection. In all cases the first symptoms appear at the end of this time. As soon as the collapse has reached a certain degree—intermitting pulse, slow and irregular respiration, colliquative diarrhea, excessive vomiting—we must arrest its further development. If the individual has been taking very large doses, (twenty-five to thirty grains), it will be sufficient to inject one-thirtieth of the quantity taken; if large doses, (eight to fifteen grains), one-fifteenth; and if small doses, (less than eight grains), one-tenth, in order to produce not a very pleasant and agreeable sensation, but a tolerable condition, and to prevent the dangerous collapse.

It is well to begin the treatment at night. The first night then passes with little disturbance; in the course of the following day, the symptoms increase till they reach their maximum at night. The above injection is then given, and secures a moderate degree of rest. The following morning the symptoms again increase, and grow worse till night, when the patient receives one-fortieth, one-twentieth, or one-fifteenth of his usual dose. This may be repeated the third, fourth and fifth day, decreasing the dose. The quantity to be taken can be stated approximately only, and the physician must be governed in each case by the condition of his patient. It will rarely be necessary to resort to larger doses than those quoted.

I have resorted to this treatment in sensitive individuals; twenty-four hours after the last injection, the one-thirtieth, one-fifteenth, or one tenth part of the usual dose was administered, and forty-eight hours after, the one-fortieth, one-twentieth, or one-fifteenth. It was very seldom that injections were necessary on the third or fourth day.

We learn by this method of treatment, that when the use of morphine has been stopped once, it requires only comparatively small doses to prevent dangerous collapse, and that in them we have a means of ameliorating the suffering caused by the absolute withdrawal of morphine. The indications for treatment, therefore, are: Absolute denial of morphine to all robust individuals; the employment of the modified treatment in females, and in sensitive male subjects. Both of these classes are to give up morphine permanently. The modified treatment is to be resorted to, also, in the cases of those suffering with chronic, painful, or incurable diseases, in order to bring the required dose of morphine down to a minimum.

After testing this treatment, objectively, I think none will advocate "gradual abstinence." Though the modified treatment is free from danger, though it is less burdensome to the patient, the physician, and the nurses, it is advisable to exercise the same stringent medical supervision in this as in the "absolute" method.

As soon as the patient has learned to do without morphine, and, feeling refreshed in body and mind, begins to make plans for the future, we must arm him at once against an enemy who constantly threatens the man once addicted to morphine—the relapse.

Before I refer to this relapse, let me call your attention to a class of cases, who cannot dispense with morphine permanently:

Certain individuals, who have been addicted to large doses, (fifteen to thirty grains), for ten to fifteen years, can not bear the permanent refusal of opium, though they are not suffering with any bodily or mental disease. After they have been cured of their habit, they do not feel content; true, they sleep, appetite has returned, and their appearance has improved, yet they feel sick. In about five or six months, appetite and sleep are lost again; the appearance is that of suffering; they lose flesh and begin to waste. Physical examination detects no cause for these pathological symptoms. I first thought these patients had a relapse, and were secretly taking morphine, but rigid observation soon convinced me that this was not the case. And what is required to relieve these cases, which, happily, are very rare? Morphine. Years of continued indulgence, have made morphine a vital necessity to their organization, and we should be committing an irreparable and unjustifiable blunder, if we withhold it from them. Before resorting to the administration of morphine in these cases, however, they should be well controlled. In aged individuals, we need not resume the drug before the expiration of five or six months; in those of middle life, we may wait a year. Small doses of one-tenth to one grain, two or three times a day, will be sufficient to restore sleep, appetite and content, and this dose need not be increased.

Of 110 patients addicted to morphine, who have been in my care, 82 were men and 28 were women; and yet I do not believe that men are more predisposed to the disease than women. Their occupation, their social position, the demands made upon

their capacities, their public action, tempt men more frequently to resort to the syringe. This explains, too, why the largest proportion of those who are addicted to morphine are physicians.

Of the 82 men and 28 women referred to, 32 were physicians, 8 were the wives of physicians, 1 the son of a physician, 2 sisters of charity, 2 hospital-stewards, 1 midwife and 1 medical student. 47 persons therefore connected with the profession or the hospital. Next to these the army officers furnished the largest contingent: 18 officers and 1 the wife of an officer. The rest were distributed as follows: 6 druggists and 1 the wife a druggist; 11 merchants and manufacturers and 5 the wives of merchants; 4 wives of officials; 2 old maids, 3 capitalists, and 2 the wives of capitalists; 3 large farmers, 4 lawyers, 1 teacher and 2 governesses. The youngest of these patients was 21 years of age; the oldest 65.

The morphine habit was acquired by 20 men and 6 women, after acute diseases; by 46 men and 17 women after chronic painful affections. One man employed it as an anaphrodisiac; 15 men and 5 women took to the use of morphine for the pleasant sensations which it causes and to drown their cares.

Of the 110 cases, 12 men became drunkards while using morphine.

Of the 82 men, 61 had a relapse; of the 28 women, 10 relapsed; of the 32 physicians, 28 returned to the morphine injections.

If we examine into the causes which make physicians above all others subject to this disease, and so liable to relapses, we are convinced that it is solely in his profession, that we find it. It is not appetite which tempts them to use the morphine. I have treated worthy and honorable men for this disease, who were enthusiastic in their profession, who thought of themselves last, and sacrificed themselves to the fulfilment of their duties. The physician who has acquired the habit of using morphine injections, during some acute disease, is compelled to resume practice after he has been cured. As his external appearance even should favorably impress his surroundings, and should indicate neither languor nor feebleness, and as his exertions, especially in country-practice, and in obstetrical and surgical cases in which he frequently lacks the necessary assistance, all demand that body and mind should be fresh and

vigorous, and as he still lacks this freshness and vigor, he returns to the use of morphine, which has helped him through many hours of care and made him forgetful of it.

The relapse is also favored by the length of time during which the after-affect of morphinism continues. Months after the patient seems to be cured, he will suddenly be seized with fits of restlessness and fever, which recur in a few days, accompanied by a violent longing for morphine. These attacks sometimes occur at long intervals; sometimes however, they recur for days and weeks, and unless the patient possesses great will-power, or proper measures of protection have been taken, he will succumb to his desire for morphine.

Physicians themselves frequently cause relapses; they proceed on the theory that the patients have been cured of their morphine-habit and then give them morphine-injections, when they complain of toothache, migraine, etc., or simulate it. The old passion returns and the patient relapses. Of 8 patients whom I treated a second time, and the history of whose first attack is contained in the first edition of my monograph, 5 relapsed in this manner.

Can a relapse be prevented at all? Under certain conditions, yes. Among these must be enumerated: that the patient should possess a strong will, that he should not be advanced in age, that his material condition should permit liberal expenses, and that he should not have been addicted to the use of morphine for many years.

When a patient is discharged as cured, he should be warned that he has been cured of the morphine-intoxication, but not of the desire for morphine; that for a year he will be subject to attacks of longing for morphine, which he will find it very difficult to resist, and that it is to his interest to submit voluntarily to being watched for his own good. If the patient is not married, he should not live alone, but should select a confidant from the circle of his friends to guard him. Druggists generally relapse very soon, and can scarcely be guarded against a relapse, unless they quit their trade. Physicians are almost sure to relapse, if they do not abandon all attempts to administer morphine injections to their patients.

These propositions appear very Draconic; they seem to insult the dignity of humanity. Men of intelligence and culture should have sufficient self-control to overcome a passion fraught

with such evils! Alas! experience proves that the propositions to avoid the relapse are just.

Can a physician conscientiously dispense with morphine injections? If the physician denies his patients the benefits of this remedy simply to protect himself, he is violating his duty, and is not conferring the blessings of the profession to which he has devoted himself.

But the question does not present itself thus. The physician can always substitute the internal administration of narcotics for the morphine injections, and in the few cases in which the latter are absolutely called for, can send a substitute or turn the patient over to a professional brother. Morphine injections administered by a physician who has once been their victim, at once arouse the old love and longing; and between the thought and the act the demoniac power of morphine tolerates no pause.

During the last year I have heard of four deaths of physicians who were addicted to morphine. All had constantly increased their dose, and had taken morphine internally besides the injections. Three had died in the same manner; they went to bed at night apparently well, and were found in the morning with every symptom of morphine poisoning, and died in spite of all exertions, a few hours later.

One had acquired the habit while subject to neuralgia; two had used the morphine to procure sleep; the fourth died during treatment for relief from his habit, but not in consequence of the treatment. Allow me to sketch his history.

In 1876 I reported to you a case of albuminuria dependent upon the morphine habit. The patient was a physician, director of a hospital, who had made use of morphine injections for seven years, and consumed thirty grains a day. Besides albuminuria, he also suffered with morphine-intermittens, at first tertian, but later quotidian. Four weeks of treatment dissipated all these symptoms, and the patient went home fresh and healthy, having gained nine pounds in weight. Three quarters of a year later he visited me, and told me that without any apparent cause he had had such longing for morphine-injections, that he could not resist, and made injections for four or five days. Three months later he again used the injections for a few days. Their use was followed by the appearance of albumen in the urine. June 14, 1877, I saw him again. The urine contained a small quantity of albumen but no casts.

Subsequently I learned that the patient had a relapse and was again suffering with intermittens. On August 14, 1879, I received a letter from his assistant, stating, that owing to the severe symptoms of morphine intoxication, his chief had again submitted to treatment. Though isolated and in bed for fourteen days, he had secretly managed to get some opium. He was now more carefully guarded, but the symptoms caused by the withdrawal of morphine were so severe, that the assistant wished to know whether he should give him the morphine he craved so much. I replied, he should give him twice a day one-fifteenth of his usual dose, but that it would be exceedingly difficult to conduct the treatment in the patient's own house, and that it would be better to transfer him to this hospital. This was done with the patient's consent, and he entered the *Maison de Santé* Aug. 16th, at 1 o'clock.

Status præsens.—Complexion dark-red; exophthalmus (congenital) as well pronounced as in the severest form of morbus Basedowii; conjunctivæ injected and the pupils contracted *ad minimum*; patient drowsy; answers questions slowly but correctly, and immediately goes to sleep again; respiration 14; pulse 60, and now and then intermitting.

Three o'clock.—Patient easier; looks about pleasantly and converses about his institution, its members, the quantity of opium and morphine consumed there, and also confessed to having deceived his attendants before arriving at the *Maison de Santé*.

Five o'clock.—Drowsy again and must be kept awake by questions and external irritants; speech thick; pupils contracted; exophthalmus less marked.

Seven o'clock.—Drowsiness unchanged,—patient goes to sleep even while talking. Respiration 16.

Eight o'clock.—Respiration labored. Patient groaning.

Nine o'clock.—Answers only to loud questions; short, but correct. Cough and singultus.

Ten o'clock.—Drowsiness increasing; little reaction when called; when shaken, the patient momentarily opens his eyes and lisps: yes.

Eleven o'clock.—Respiration, sighing. Extremities cool and moist.

One o'clock.—Breathing nervous. Tracheal rattles. Pulse scarcely perceptible.

Half-past two o'clock.—Death.

Post-mortem.—Edema of lower extremities; dura mater adherent; brain uniformly anemic; ventricles of normal size; the ependyma smooth, except in the fourth, in which it is a little granular; heart not much enlarged; right ventricle and auricle slightly dilated; spleen enlarged 28 cm. in length, 15 in width, 8 in thickness; both kidneys enlarged, partly parenchymatous, partly interstitial nephritis; spleen and liver, which latter was of normal size, were granular in patches and gave no reaction with iodine, while the glomeruli and vasa recta of the kidneys were intensely colored.

The morphine habit is of no importance in criminal law, as the culprit does not lose the possession of his will by any pathological disturbance in his mental faculties. It is purely a passion. It is of consequence, however, in civil law, and insurance companies will soon have to take it into account as they do drunkenness. Gradually, the man addicted to morphine shortens his life and thus injures the insurance company as the drunkard does. But the cases are not parallel. No one becomes a drunkard by therapeutic causes, but morphine-addicted very often. Most patients resort to the use of morphine to relieve suffering, sleeplessness, etc.; even in these cases morphine must still be regarded as a remedial agent.

Insurance companies, therefore, cannot extend the paragraph in regard to drunkards to include morphine-eaters. Only those individuals who resort to morphine without bodily or mental suffering, can be classed with notorious drunkards.

All insurance policies contain a clause declaring the policy void in case of suicide (sane or insane). It does not matter, therefore, whether the suicide is intentional or not.

I have referred to the deaths of our colleagues, because the question occurs whether the companies can quote the above provisions in refusal of payment.

Three of these physicians used the morphine therapeutically; then became addicted to it, increased the dose until they took one which proved fatal. They committed suicide—unintentionally to be sure—but this is irrelevant.

The fourth dies a similar death. He subjects himself to the “abstinence” treatment, eludes his attendants, takes one-third of the dose which, a week before would not have produced any narcotic effects, and dies from it.

We have found in the modified treatment, that in twenty-four

hours after its commencement, one-fifteenth of the usual dose will cut short the severe symptoms. By the sudden withdrawal of morphine the body is rapidly liberated from the drug, and soon becomes susceptible of being acted upon by small doses. A dose to which a person has already been accustomed, will prove fatal therefore during the period of abstinence.

Whether these four cases can be decided by the paragraph regarding suicides, is a legal question. In issuing new policies the insurance companies will have to take notice of the morphine-habit. The heirs of those now insured must resort to the courts, and the testimony of experts must decide every individual case. (*Berlin. Med. Wochenschrift*, Feb., 1880).

TWO NEW CASES OF NECROSIS OF THE PANCREAS.

BY DR. HANS CHIARI.

A woman, æt. 46, entered the Vienna General Hospital, Aug. 4, 1879, complaining of severe abdominal pain of several days duration. Subsequent to her admission, frequent vomiting occurred, and symptoms of a general peritonitis.

Seven hours before her death, which took place Aug. 24, she had a chill and began to vomit freely a dark and very bad smelling fluid; this vomiting continued until death.

Post mortem.—General purulent peritonitis. In the bursa omentalis, pus, mingled with blood, and containing the pancreas held only by a few softened shreds of connective tissue. The gland was much softened and dark brown. Upon section its duct was readily distinguished. The wall of the bursa omentalis was formed partly of thickened peritoneum and partly of thickened connective tissue; it was ulcerated in many places. The descending duodenum exhibited a perforation into the bursa the size of a bean. There was also a perforation into the transverse meso-colon and extension of the suppuration between the two layers of the very fatty mesentery. The arteria pancreatico-duodenalis at about one and one-half inch from its origin, had ulcerated away no thrombus. A little over

an inch of the pancreatic duct remained attached to the gut. Mucous membrane of the stomach intact; there was mucus mingled with a little blood; small intestine and upper colon contained feculent matter mingled with bloody pus; lower half of colon contained feces only; gall bladder contained about sixty calculi, in size up to a pea; no other abnormality.

Diagnosis.—Complete necrosis of the pancreas; extensive suppuration in the bursa omentalis with perforation of the duodenum and meso-colon transversum, and consecutive diffuse peritonitis, and opening of the arteria pancreatico-duodenalis. The last occurrence may explain the peculiar emesis that appeared seven hours before death, and the death itself.

The second case is one in which the pancreas, or the chief part of it, came away in the feces, the patient surviving. I am indebted to Dr. Schossberger for the specimen and the history of the case.

Patient, male, æt. 38 years. In 1878 suffered from gall-stone colic, and was under Dr. Schossberger's treatment for several weeks with apparent complete recovery. Sept. 18, 1879, without any previous illness, felt during the night uncomfortable, some abdominal pain. This condition lasted without much change until Sept. 28, when the pain became more troublesome; it was referred to the region of the stomach, and it seemed as if there was a twisting movement there. This sensation was not constant. During all this time the patient attended to his usual out door business. In the night of Oct. 1, he awoke suddenly with a violent desire to vomit, which was followed by repeated emesis and a passage of feces. The pains now greatly increased; he could get no rest, and vomited continually. The chief seat of the pain seemed to be in the middle epigastrium, and comparable to a severe colic. At this time Dr. Schossberger visited the patient and found him with symptoms of constriction of the bowels, anxious facies; cold sweat, accelerated feeble pulse; increased respiration; occasional excessive pains in the region of the epigastrium, which was somewhat distended; epigastrium painful on pressure. The symptoms were relieved by subcutaneous injection of morphia. Oct. 2, 10 a. m., patient comfortable, only weak, no fever.

Oct. 4. Symptoms of intestinal obstruction; abdomen greatly distended; diaphragm forced upward; respiration superficial and increased; epigastrium again painful; nausea, and finally

vomiting of greenish viscid material. No symptoms of peritonitis; no fever; emesis nearly every three minutes; no fecal passage, nor of gases, although large doses of calomel were given and repeated injections of water and castor oil. Each act of vomiting caused increased pain, in the epigastric region; and the patient became so weakened that he could not change his position in bed without assistance. Morphine injection. The next day after free injections of water, there passed very offensive feces with gas; great relief followed. The subsequent treatment consisted of water injections and laxatives, which gave rise to free fluid evacuations. The meteorism gradually disappeared and the patient began to take nourishment, complaining only of pain in the epigastrium, and tenderness of the abdomen.

Oct. 20. Suddenly taken with a violent fever, pulse 130; this lasted unchanged for three days, when the same symptoms of intestinal obstruction occurred, and in addition considerable swelling of the spleen. Pain in the region of the stomach and spleen. Again I succeeded in obtaining evacuations, and the febrile condition ceased.

The conditions of obstruction and non-obstruction alternated until Nov. 7, when, after an abundant evacuation, a piece of tissue was discovered in the matters discharged, which proved to be the remains of the pancreas. The pains from this day disappeared, only a tenderness in the left side remained; all the symptoms gradually diminished, and after a few weeks the patient was in perfect health. The evacuated pancreatic tissue measured in length 13 ctm., was cylindrical, and of the thickness of the finger. Although the tissue was much disorganized by suppuration, still some of the gland structure could be detected under the microscope; the duct with its branches could be in part dissected.

This last case resembles one described by Rokitsansky: A male patient, æt. 52, of robust frame, after suffering from violent hepatic colic which was followed after several weeks by an evacuation per anum of eighteen small gall stones, was taken three days later with the severest colic and with vomiting. One day after this last attack, there passed from the bowels a mass of tissue recognized as the pancreas. The patient made a rapid recovery, and at this day enjoys most excellent good health.—*Wien. Med. Woch.*, Feb. 7, 1880.

MEDICAL JURISPRUDENCE—A NEW SIGN OF DEATH BY
STRANGULATION.

BY PROF. HERMANN TRIEDBERG, BRESLAU.

In a previous number of the *Archiv.*, the Professor had shown that effusion of blood into the wall of the carotid, is a most valuable sign of the action of the fatal noose, in cases of death by hanging or strangulation. In the present article he proceeds to demonstrate that the same sign is present in cases of death from throttling, in a deadly encounter. He points out the extreme importance of such an unmistakable sign in regard to Medical Jurisprudence.

The Professor, upon examination of the bodies of two victims of violence, was able to determine the fact of strangulation by the following appearances:

Case I.—No external appearances of injury; the neck being *especially free from such signs*. There was remarkable congestion of the capillaries and small vessels, of the outer coat of the right common carotid in its upper half, and of the internal carotid in its lowest portion. Cutting the common carotid open lengthwise, an irregular red patch became visible upon the posterior wall, just below its bifurcation, and continuous into the lowest portion of the internal carotid. There were also scattered spots of atheroma, in one of which, in the lower portion of the red patch, a rupture of the inner coat had taken place, which had allowed some of the effused blood to escape. Laying open the region of the red patch, there was found to be an effusion of blood into the middle coat; upon the left carotid similar changes were found. In consequence of these appearances, it was decided that death had been produced by choking with the hand.

A careful examination of all the organs was made as well—the venous system of the thorax and cranium, was found greatly distended.

Case II.—Upon the anterior surface of the neck, distinct discolorations. At the bifurcation of the left common carotid, a

small extravasation in the anterior wall of the sheath. A corresponding extravasation in the exterior coat of the artery. Under the intima, a similar effusion upon the anterior and outer wall. Examination of the remaining organs, as in case I. In this case, the cause of death was more clearly indicated by the discolorations of the neck, which were due to limited extravasation, into the adipose. In both cases the testimony proved that strangulation had been inflicted, and by the hand.

The professor calls attention to these conclusions:

Strangulation exercised upon the living body, may cause extravasation of blood in the wall of the carotid, if sufficient force be exerted to rupture the vasa vasorum. Such force may not always be exerted, hence the extravasation will not inevitably be present, but when it is, the sign is all important. — *Virchow's Archiv.*, March 8. 1880.

REPORTS ON PROGRESS.

MONTHLY REPORT ON THE PROGRESS OF THERAPEUTICS.

Veratrum Viride and Aconite in Puerperal Eclampsia.—STAPLES claims to have arrested puerperal convulsions, with uniform success, for nine years past, with hypodermic injections of veratrum and aconite every twenty to thirty minutes, until the system was brought under their influence. Average dose, four to six drops of the former, and two to three of the latter.

Effects will be observed in fifteen minutes, and no ill results have been experienced in the punctures. He finds the two drugs combined more efficacious than the veratrum alone, while a smaller dose is required. He also claims that the treatment is equally efficient in spasms from other causes.—*Med. Rec.*, Feb. 21, '80.

Chloral Hydrate.—HICKMAN makes the following suggestions as to the use of chloral hydrate: No practitioner, who keeps pace with the progress of the day, would for a moment think of exhibiting chloral, where either the respiration or circulation were seriously compromised. It would be absolutely criminal to give it in advanced (or recent, either, for that matter) disease of the lungs, where the right heart is being continuously overtaxed. Nor would he be less guilty who would think of giving chloral in the sleeplessness of valvular disease of the heart. A fatty heart would not certainly brook even a medium dose of chloral. J. Crichton Browne has ascertained that chloral exerts an effect proportional to cerebral development; that it must be administered most cautiously to the most intellectual. Even so apparently trivial a point as the temperature of the patient's room, should be taken into account; for we must remember that the tendency of this agent, besides slowing the action of the heart, is to dilate the peripheral vessels, and thus to increase the heat-losing area of the body.

It should be recognized as an undisputed fact, that there is no soporific agent at all comparable to chloral. It will not, however, exert the slightest soporific influence in painful conditions of the system—it possesses no anodyne properties whatever.

In conditions where the patient is *too weak to sleep*, anodynes aggravate rather than secure rest; while in chloral, perhaps with the bromides, given with a little light wine or champagne, we have the most efficient means at our command. In the sleeplessness due to excessive mental work, chloral exercises a peculiarly happy influence.—*Med. Rec.*, Jan. 10, '80.

Ricinus Communis as a Galactagogue.—MM. BOUCHER AND FONSSAGRIVES have called attention again to the value of the ricinus communis to promote the flow of milk. The method which they recommend is as follows: A handful of the leaves of the ricinus communis are boiled in a litre (quart) of water. The decoction is applied as a lotion to the breasts, for fifteen or twenty minutes; poultices are then made with some of the same leaves, applied to the nipples, and left on until they become dry. In a few hours the effect is evident.—*Med. Press and Circular*.

Borax in Epilepsy.—GOWERS, in his course of lectures (Gulstonian) on epilepsy, delivered before the Royal College of Physicians, of London, says that a rational therapeutics of epilepsy seems to be yet impossible, and that remedies used empirically have been of most service. Of all remedies used, the best results have followed from the bromides, and especially the potash salt. But in several inveterate cases of epilepsy in which bromide had no effect, he has used borax with excellent effect. "The doses given have been ten or fifteen grains, twice or three times a day. It produces, in some patients, gastro-intestinal disturbances, and, rarely, a form of dysenteric diarrhea. By others it is well borne, and one of my patients has taken forty-five grains a day, for twelve months, without the slightest inconvenience, and says that no medicine has ever done him so much good. In cases in which bromide fails, borax certainly deserves a trial."—*Brit. Med. Jour.*, Apr. 10, '80.

Apomorphia in attacks of Hystero-Epilepsy.—In the same lecture, when speaking of the treatment necessary during the attacks, he says: "In pure epilepsy, the only treatment needed during the attacks, is such care as shall secure the patient as far as possible from injury. It is very different with the attacks of hystero-epilepsy, which, from their character, severity, and long duration, often furnish the attendants with a task of no small difficulty, and which can, almost always, be cut short by appropriate treatment. * * * The remarkable effect of nausea, in relaxing spasm, led me some years ago, to try the effect of injections of apomorphia, and I have found it an unfailing means of arresting the attacks. After the injection of a twelfth of a grain, in four minutes, with certainty, all spasm ceases, and normal consciousness is restored; in six minutes the patient will get up and go to the sink; in eight minutes will vomit, and afterward, except for slight nausea, is well. A twentieth of a grain has the same action, but is rather longer in its operation. Moreover, I have found that the treatment is, so far as the hysteroid symptoms are concerned, curative as well as palliative, for the attacks in many cases, after a few paroxysms, has been thus cut short. *Ibid.*

Nitro-Glycerine in Migraine, Asthma and Angina Pectoris.—

ROBSON reports most satisfactory results from the exhibition of nitro-glycerine in migraine, asthma and angina pectoris. He administers, at first, one minim of a one per cent. solution, but sometimes finds it necessary to increase the dose to three or four minims, in order to produce the desired effect. In several cases of asthma, the relief has been most remarkable; the cases in which it answers, are such as would be relieved by amyl-nitrite, but its effects are more marked, and the relief is more durable. In one case of severe asthma, occurring in a patient suffering from chronic renal mischief and mitral deficiency, the remedy was prescribed in the form of one minim of the one per cent. solution, to a drachm of water, and two drachms every fifteen minutes were to be taken. Instead, the patient took two large tablespoonfuls. He said that the effect was wonderful; he thought his head was going to burst, but his breathing was effectually and permanently relieved, and that instantly. On a previous occasion, amyl-nitrite had been inhaled with little effect. Since that time, several months ago, he has been threatened, over and over again, with his old attacks, but a dose of the medicine always staves it off.—*Brit. Med. Jour.*, April 10th, '80.

Defibrinated Blood as a Substitute for Beef Extract.—F. E. STEWART suggests the administration of defibrinated blood, in cases where there is rapid tissue waste. Cod-liver oil supplies efficiently the waste of tissues, where carbon is a principle element, but the most exhausting waste in acute cases, is of the nitrates, for the supply of which nitrogenous food is demanded, especially meat.

But the stomach of a sick person is unable to digest solid meat; and the various articles that have been offered, in the form of beef-teas or extracts or essences, fail to meet the requirements of the case. But "Blood is meat in a fluid form, every ounce containing as much solid matter as an ounce of meat."

He says that if defibrinated blood be first dried, afterward it can be dissolved in a suitable vehicle, and so rendered palatable and disguised. He recommends one part each of brandy and glycerine, to four parts of water, in which the dessicated blood is first dissolved. The preparation, when completed, should contain about one drachm of the powder to every ounce.—*Med. Rec.*, March 15, '80.

Carbonate of Ammonia in Respiratory Diseases.—THOMAS formulates the following propositions at the close of a paper upon this subject:

1. In every form of pneumonia, it is the best single remedy, and is indicated in all cases in connection with any other additional treatment that may suggest itself to the practitioner.

2. In the great majority of cases of croupous pneumonia, in connection with counter-irritation, when indicated by the amount of pain, aided by proper alimentation, it will abort the disease, and cut short its course several days.

3. In all suffocative cases of the respiratory organs in children or adults, whether the result of acute capillary bronchitis *per se*, or coincident upon the exanthemata, it is the remedy *par excellence*.

4. Judging only from a very limited trial of it (only five cases) in diphtheria, it is far superior to alcohol, and does seem to possess the power of dissolving the membranous exudation. And with or without local treatment, in connection with the tincture of the chloride of iron and small doses of quinia, it has, in my hands, produced better results than any treatment I have yet tested in trying to combat this terrible scourge.

5. In the suffocative stages of simple croup, it is a *sine qua non*; and, aided by cold compresses to the throat, may prove of great value in the membranous form.

He also recommends it in whooping cough and as a prophylactic against heart-clot, and thinks it may in some cases dissolve emboli after they have been deposited in the venous or arterial system.—*Virg. Med. Monthly*, April, '80.

Carbolic and Oleic Acids in Erysipelas.—JACOBI proposes carbolic and oleic acids, in the proportion of one to eight or ten, and applied to the skin, which is tolerably normal around a patch of erysipelas, to arrest its further development. Small quantities, frequently repeated, every half hour are to be thoroughly rubbed in with a protected finger.—*Med. Rec.*, Feb. 14, '80.

Remedies for Sea Sickness.—CORY, lately surgeon on a passenger steamer, recommends in *mal de mer* a combination of small doses of bromide of potassium and hydrate of chloral taken with the citrate of magnesium during effervescence. Spirits of sulphuric ether may be added when there is much depression.—*Lancet*, March 20, '80.

Treatment of Ringworm.—COTTLE employs the following methods in the treatment of this annoying disease: In ringworm of the body, in infants, and in cases of *recent origin* on the scalp in older children, after the hair has been cropped short around the affected spots (if on the scalp), and the part well scrubbed with soft soap to insure the removal of crusts, etc., he directs the affected parts to be thoroughly soaked and rubbed three times daily, with a solution of salicylic acid in alcohol (30 grs. to the ounce).

The diseased hair, crusts, etc., must be cleared away as often as they are reproduced. This is generally all that is required. Any lingering patches should be painted with glacial acetic acid, blistering fluid or carbolic acid. In *chronic* ringworm of the scalp it is often necessary to produce a pustular rash. To effect this, the inveterate patches should be freely painted with the linimentum crotonis (B. P.) Washing the part with alcohol or ether before applying the liniment makes its action more certain. If the croton liniment does not produce suppuration, it is repeated, and if necessary the skin is blistered before putting it on, or a stronger liniment may be used. The parts become covered with a yellow crust, which should be removed immediately by poulticing or softening with oil. Most of the diseased hairs come away with the crusts; any that remain should be epilated. After the removal of the scabs and hair the salicylic acid should be freely applied.—*Lancet*, March 27, '80.

Powder for the Ulcers of Herpes.—FOURNIER recommends that the ulcerated vesicles of herpes should be washed several times a day with Labarraquess solution diluted with equal parts of water, and then covered with a pad of wadding charged with a powder composed of subnitrate of bismuth four parts, calomel and oxide of zinc, of each one part. If the eruption is extensive, absolute rest is necessary, and bran baths, together with the internal use of opiates and bromide of potassium, should be administered.—*Union Méd.* March 6th.—*Med. Times and Gazette*, March 20, '80.

Iodide of Potassium and Opium in Rheumatism.—BARTEN advises large doses of iodide of potassium in acute rheumatism. He is in the habit of using five to twenty grains every three hours, with ten grains of Dover's powder at night. He says that under this treatment the disease lasts but a week or ten days, and that heart complications are rare.—*Lancet*, Feb. 14, '80.

EDITORIAL.

VOL. III.

MAY, 1880.

No. 5.

THOMAS KEITH AND OVARIOTOMY.

In the *American Journal of Obstetrics* for April of the present year, Dr. Sims contributes an interesting and instructive sketch of the most successful ovariologist of the world, with descriptions of his methods of operation, and a detailed account of the proceedings in one case. The method of Dr. Keith's working becomes of special interest, not only to those interested in ovariectomy, but to every one engaged in serious surgical procedures; his success from the first has been far better than that of any other ovariologist, and lately he has had seventy-three successive cases of recovery. In short, in his hands the operation suggested by John Hunter in 1786, pronounced cruel and outrageous in 1824, has become so admirably systematized, that recovery is the rule, and death as the result, a rarity. Dr. Sims after carefully analyzing the question, and no one is better able to do so, concludes that the amazing success is due first and chiefly, to the patient and prolonged care in the complete arrest of intra-peritoneal hemorrhage, tying one point after another with carbolized cat-gut ligatures, sponging and exploring with the utmost accuracy of scrutiny, ligating seemingly unimportant little oozing points "until he feels sure that there is not a point left unsecured from which bleeding, after the establishment of reaction, could possibly take place." This completed, the depths of the pelvic cavity are cleansed with small sponges, until they come out clean. The pedicle is treated with either ligature or cautery. When the latter is used, Keith does not allow the iron to retain even a red heat; but dips it into cold

water until the redness has disappeared, and with the black hot iron slowly severs the tissues, afterwards smoothing them off with another iron at a brown heat. The drainage tube is used if there be an effusion of *bloody serum*. Dr. Sims concludes from his observations, that bloody serum is more dangerous in the peritoneal cavity than either pure blood or pure serum; consequently, if there be no adhesions, even though ascites exist, drainage is unnecessary; if doubt arises as to the perfect control of hemorrhage, drainage is advisable. The antiseptic method of Lister is minutely employed; and to this measure is Keith indebted for raising his percentage from eighty-seven to ninety-three of recoveries.

Before closing the external wound, Keith adopts the plan of Spencer Wells, of placing a broad flat sponge, (first wrung out in hot carbolized water), over the intestines, passing his sutures over this; after the sutures are *in situ* they are seized at their centre and drawn, one-half upwards, one-half downwards, thus allowing space for the sponge to be withdrawn; this sponge receives any drops of blood that occur from the passage of the suture needle, and also shows if any other bleeding has happened; in case there is evidence of hemorrhage, another search for bleeding points is instituted. Dr. Sims has added a second sponge, which is clasped in lock forceps and passed into the pelvis, so that no bleeding can arise while the last steps of the operation are in progress, that will not be declared before the wound is finally closed.

After-treatment, since Listerism has been used, is of the simplest. If pain occurs, twenty drops of laudanum, or its equivalent, is given by the rectum, to be repeated if necessary. For the first forty-eight hours the patient gets no nourishment, except a little brandy and ice as they may be required. At the end of this time light nourishment, as beef-tea and milk; in a day or two, unless some contra-indication exists, the bowels are moved by an enema, and, if all goes well, a more nutritious diet is allowed.

SEVERE REFLEX SYMPTOMS DUE TO PRESSURE WITHIN THE EXTERNAL AUDITORY MEATUS.

The attention of the profession is continually drawn to the very serious affections of a reflex nature, due to aural pressure; affections that demand active interference, but their true nature being overlooked, they resist all treatment. Two cases recently published, especially illustrate the necessity of bearing in mind these facts.

A. E. Bridges, M. B., reports in the *London Lancet*, March 6, a case of very troublesome cough caused by pressure in the auditory canal. A young lady of robust health, consulted him on account of a cough of three years standing; it was loud, incessant, dry, and not affected by times of day, weather, or seasons. She had consulted various physicians, and had taken much medicine, without avail. The condition of the throat was natural; there was no relaxation of the uvula. The right membrana tympani was hidden from view by a dark mass. Pressure upon this mass immediately excited the cough; when continued, a fit of coughing not unlike a paroxysm of whooping cough, resulted. Syringing with an alkaline solution, a piece of hard wax, weighing over three grains was removed. The air douche was then applied. The cough ceased and has not returned.

A somewhat similar case was reproduced not long ago in the *Courier*, from an earlier number of the *Lancet*. Such cases illustrate with what simple means, very severe ailments may sometimes be relieved. It is not too much to hope that with a better knowledge of the mutual relations of the different parts of the nervous system, we shall be able to detect many "sympathetic" diseases that are now the despair of the practitioner, but which, when understood, may be subject to rational treatment with happier results.

Dr. L. Katz, in the *Berlin. Klin. Wochenschrift*, March 22, gives a case of pronounced Reflex Epilepsy, produced from the presence of a wad of cotton in the ear.

A woman, æt. 30, of sound parents, several children, not hysterical, fairly vigorous, but anemic. For about a year she has suffered from noises in the left ear (like the roaring of the sea), which latterly had become louder and less bearable. These noises fluctuated in intensity; at the same time there was frequently a very marked quivering before the left eye and such a violent giddiness, with fainting, that the patient often would be obliged to seize hold of a neighboring object to escape a fall.

Almost coincidently epileptiform seizures appeared, which occurred every one or two months, and in the night time. In the last two months, these took place in the day time also; once upon the street, the convulsions were of a violent character, and the patient had to be taken home in a carriage.

Eight days after the last attack she came under my charge on account of the aural disturbances. I found in the bottom of the left auditory meatus, a solid dark mass, which seemed to fill the canal completely. This proved to be a wad of cotton saturated with, and enveloped in cerumen. It had probably been carried two years. The membrana tympani had a nearly normal appearance. Hearing distance subsequently normal. The noises and giddiness disappeared immediately. The ocular symptoms persisted in a mitigated form for a few days. The epileptiform attacks that latterly had occurred three times in five weeks, since the removal of the cotton, four months ago, have failed to appear.

EXTRA-OCULAR SECTION OF THE OPTIC AND CILIARY NERVES AS A SUBSTITUTE FOR ENUCLEATION OF THE GLOBE.

Dr. Ch. Abadie presented a paper at the Chirurgical Society in Paris, in which he described the advantages of the extra-ocular section of the posterior nerve connections of the eyeball, in operations for sympathetic ophthalmia. The doctor operates as follows:

The tendon of the external rectus is cut across, as in the operation for strabismus, the sclerotic is then bared above and below, avoiding injury to the superior and inferior recti. This denudation is to be continued until the optic nerve is reached, which is then cut across. The globe now having a degree of mobility, is to be dislocated out of the orbital cavity, and the posterior pole brought into view with the stump of the optic nerve. The sclerotic about the stump is to be very carefully denuded, and all the nerves and the posterior ciliary vessels are to be severed. The globe is then to be replaced, and the external wound subjected to the usual treatment. The doctor specially insists upon the complete denudation of the sclerotic about the optic nerve, as the special merit of his method. He states that no sloughing has followed this extensive injury of the innervation and blood supply, the latter being maintained sufficiently by the vessels of the anterior segment.

The doctor attributes the slight inflammatory reaction in his cases to his minute precautions. For forty-eight hours, the the compress bandage is left undisturbed over the eye, and kept moistened with a one per cent. solution of carbolic acid; the temperature is kept low by means of ice, 3°—4° C.

In principle the operation is not a new one. In 1866 DeGraefe and Meyer suggested the substitution of intra-ocular section of the ciliary nerves for enucleation. Rendeau, also, suggested the section of both the opticus and the ciliary.

Dr. Abadie had followed the new procedure for about one year, operating eighteen times in the most unlike cases. In three cases the operated eyes, though long sightless, had suffered no deformity, and the cornea had remained transparent; the extra-ocular section left them innocuous, and spared the patients the inconvenience of wearing artificial substitutes.

In other cases there were painful stumps intolerant of the artificial eye, the operation afforded complete relief without destruction of the stump and consequent loss of the capacity to carry naturally the glass shell. In two cases the eye had acquired an enormous volume through staphylomatous degeneration. As this condition remained after the operation, the sclerotic was subsequently incised and some of the vitreous allowed to escape, a compress was then applied. For a few days the wound was regularly reopened to allow fresh portions of the vitreous to escape. This maneuver performed upon eyes entirely insensible, provoked no reaction nor pain, and determined gradually a progressive atrophy; when this was sufficient the cicatrization was tolerated and a useful stump resulted in both cases.

It must be borne in mind that there are two forms of "sympathetic ophthalmia." The true sympathetic ophthalmia is clearly defined in nature. An individual with normal eyes suffers injury in one in the ciliary region. After a time varying from a few days to several weeks after the accident, the other and hitherto healthy eye becomes photophobic, injected, inflamed; the media become obscured, the iris discolored, and exudations appear in the anterior chamber. In such a case enucleation of the eye first diseased is imperative and must be done as quickly as possible.

A second form: When an eye long lost through some cause, and having a defective nutrition, inflames and becomes painful, perhaps on account of an intra-ocular hemorrhage, or because some ciliary filaments have become entangled in contracting exudations, there may be a sympathetic response from the other side. The other eye becomes suffused with tears, and sensitive to the light; accommodation is effected with difficulty, the acuteness of vision is lessened. There are symptoms of

sympathy, but it is not a case of true sympathetic ophthalmia. The symptoms may persist a long time without determining grave disorder. They do not lead to blindness but disappear spontaneously when the irritation of the first eye is relieved. Up to the present both forms of ophthalmia have received identical treatment. In the first case enucleation is evidently demanded, in the second a less severe operation suffices.

The objection that sloughing of the cornea may follow this operation, is not well founded. Section of the posterior ciliary nerves, and section of the trunk of the trigeminus within the cranium are two very different operations, and attended by very different results. Nearly a year's observation upon operated cases, would seem to establish the safety of the extra-ocular section.



REMOVAL OF LARYNGEAL GROWTHS BY SUBCUTANEOUS OPERATION.

In number 5, 1880, of the *Berlin. Wochenschrift* appears an article by Dr. Rossbach, of Würzburg, upon the removal of intra-laryngeal tumors by means of a delicate cutting instrument thrust through the anterior wall of the larynx, a subcutaneous operation. He claims for the operation a greater facility than is possible in the usual methods, and also that it is without any danger to the patient, which is not the case in thyrotomy. The doctor uses a lance-headed knife much like the old catarrh needle, only stouter; this is to be thrust through the thyroid cartilage at its anterior angle in the median line, at such distance below the superior thyroid notch as is most convenient to the site of the tumor, which is then to be cut away. "Aside from the pain of the cutaneous wound the patient feels nothing; there is no cough, no spasmodic deglutition." As the doctor has operated only twice upon human beings, this happy course

of the operation may not be unvarying. His experiments upon animals were conducted upon subjects thoroughly narcotized. The method certainly is a promising one, and may prove a valuable recourse when the use of forceps, etc., *per vias naturales* is rendered excessively difficult. One difficulty the doctor seems to hold but lightly. Occasionally that part of the thyroid to be penetrated is more or less ossified. Such a condition sometimes proves troublesome in cutting open the thyroid in thyrotomy; one might run the risk of breaking a delicate instrument in the cartilage, or of failing altogether in the attempt at perforation. Upon completion of the operation the knife is removed, and the minute external wound closed with a bit of plaster.



THE CAUTERY AND CHIAN TURPENTINE IN MALIGNANT DISEASE OF THE FEMALE GENERATIVE ORGANS.

Since the paper published in this number of the *COURIER* has been in type, we have seen a review by W. H. Baker M. D., (*Boston Med. and Surg. Jour.*, Jan. 1880) confirming the views taken in the paper upon the subject of the cautery in malignant disease of the uterus, objecting to it for purposes of excision on account of the effect in hardening the tissues so that the touch cannot detect diseased points; approving of it in preference to styptic or escharotic applications, for staunching hemorrhage and destroying remaining traces of disease; but if further therapeutic results bear out the recent observations of Mr. Clay, of Manchester, we may soon be permitted almost, if not entirely, to lay aside curettes and cautery irons, for extirpation of cancer. The *London Lancet* of March 27th 1880, contains the records of four cases of carcinoma uteri, treated by Chian turpentine, with the result of checking bleeding, fetor and

pain, which were rapidly followed by diminution in the size, and finally, entire disappearance of the morbid growth.

The question of accuracy in diagnosis, of course cannot arise when Professor John Clay is the observer, but the details of each case are fully given. The first patient aged 52 years, suffered from scirrhus cancer of the cervix and body of the uterus. Hemorrhage was excessive, pain of the back and abdomen agonizing, and cancerous cachexia well marked, the uterus so extensively destroyed that its cavity readily admitted three fingers. Six grains of Chian turpentine with four grains flowers of sulphur, were made into two pills, and both administered every four hours during the day. No opiates nor lotions used. On the fourth day the patient reported herself greatly relieved from pain, in better spirits, but complained of vaginal discharge which consisted of a dirty-white tenacious secretion, without blood or fetor; on the twelfth day, this was replaced by a somewhat serous fluid. The os would only admit one finger; the patient's general health was improved; medicine well tolerated. In the twelfth week "the parts feel ragged, and do not bleed on roughly touching them."

The other three cases were of the same character, two of much more advanced condition, with enormous cancerous tumors; the treatment resulted in all, in the same way, steady improvement. In one, an account of the size and fungosity of the tumor after diminution under the turpentine had commenced, vaginal injections were used, in one instance, solution of perchloride of iron, in the other arsenical solution, which Mr. Clay thought assisted in reducing the growths. Many experiments were made, in which various remedial agents were added to the turpentine, and the other varieties of turpentine were also tried, but owing to effects upon the digestive or other organs which were more or less harmful, preventing the necessary constancy in use of the medicines, they were all cast aside, excepting the sulphur. In order to administer the Chian turpentine in other than pill form, Mr. Clay gives the following formula which is said to be agreeable and readily taken for weeks together. An ethereal solution of the turpentine is pre-

pared by dissolving one ounce of the turpentine in two ounces of pure sulphuric ether (anæsthetic):

R. Solution of Chian turpentine,	℥ss.
Solution of tragacanth,	℥iv.
Simple syrup,	℥j.
Flowers of sulphur,	℥ij.
Water, q. s. ad	℥xvj—

Dose, one ounce three times daily.

The remedy appears to act upon the periphery of the growth with great vigor, causing speedy disappearance of infiltration, and arrest of the further development of the tumor. Pain is promptly arrested, as are the hemorrhages. The cicatrization leaves the cervix nodular to the feel, and examination through the speculum shows small cicatricial depressions.

Glandular involvement is prevented, and the peculiar cancerous cachexia disappears. The evidence adduced by the observer is of the most encouraging character, and the treatment certainly deserves extended careful trial. Patience and perseverance on the part of both physician and patient are requisite, and the aphorism of Trousseau must not be forgotten that "chronic diseases require chronic remedies."

If this agent proves as valuable as these cases indicate, in malignant disease of the uterus, may we not expect also good results when the disease affects other organs?

CORRESPONDENCE.

LETTER FROM VIENNA.

VIENNA, AUSTRIA, Feb. 27, 1880.

Messrs. Editors :—A visit to Vienna, the beautiful capital of Austria, occasions a great surprise in the mind of an American, accustomed to the idea that the cities of the old world have attained their growth, and that the yearly transformations found in our live American towns, are not to be expected. The capital city of the so-called effete monarchy of the Hapsburgs, certainly retains remarkable vigor. The transformation which has taken place during the past ten years, will find an equal in few of our American cities, if we may except that which took place after the fire, in Chicago. There is this difference, however :—Here the buildings are massive, built of solid stone, brick and cement, and they are fire-proof. Any one of the numerous building which now ornament the *Ring Strasse*, would be considered an ornament to a live American city ; here they are found by the dozen.

As a point most interesting to medical men, a few words in regard to that Mecca of so many aspiring young Americans, the *Algemeines Krankenhaus*, (General Hospital), with some details of management, will not be amiss. This vast hospital, drawing its material both from a city of more than seven hundred thousand inhabitants, and the outlying provinces, is certainly the grandest store-house of disease in the world. It accomodates three thousand patients, in addition to its numerous polyclinics.

It is built in a series of hollow squares, flanked by continuous rows of two-storied buildings, constructed of brick and concrete. The main squares are planted with trees and shrubbery, and, unlike the gardens of many American hospitals, which are reserved for the use of the officials and for ornament, these gardens contain numerous benches, on which the

convalescent patients may be seen, enjoying sunlight and fresh air.

The manner in which the expenses of the patients coming from the country are met, is also an improvement on our American system, where the hospitals of our great cities are forced to give gratuitous assistance to the indigent poor of the whole state and surrounding country. Here the cost of each patient is taxed to the province to which he belongs, and reimbursement is exacted. In this manner, every province pays for its own poor.

The hospital is under the charge of the Medical Faculty of the University of Vienna, the whole University, consisting of the four Faculties of Theology, Law, Medicine and Surgery, and Philosophy. The whole number of students enrolled, during the year 1879, was 3,372; of these, 778 were students of medicine. This is truly a hospital of specialties; the different departments of medicine and surgery having each their special quarters. When a patient arrives, he is strictly examined, and then sent to his proper division. Each division has a chief, many of whom are the distinguished professors of the university. Each chief has two assistants, to whom the details and management of the wards are entrusted, the chief making generally one visit to the wards daily. In addition to these officials, there are connected with the hospital, a large number of instructors, called *privat docents*, or teachers, who are generally assistants or ex-assistants, to whom the privilege of using the best material for private instruction, has been accorded. These are generally men of intelligence and more than average ability, from whose ranks the sub-professors of the university are drawn. Even when they are men of medium calibre, they are still valuable teachers, standing, so to speak, as human phonographs, storing up and retailing the views and theories of their more illustrious chiefs.

The *docents* have their private classes, limited in number, from twelve to twenty students, to whom they give the benefit of the vast material in the different departments, and in the polyclinics. The cost of each of these classes, for a six weeks course, ranges from ten to twenty-five *gulden*, (\$5 to \$12).

It is with the *docents* that the American students have most to do. Most Americans visiting Vienna, are the graduates of some home college, and few care to spend the time (five years)

necessary to a university degree. They mostly attend the lectures and wards of the clinical professors, and devote the greater part of their time to the private special classes of the *docents*. The manner in which the specialties are subdivided here, would aggravate some of our venerable practitioners, who look upon one-organ-men with such contempt. With the exception of the spleen, every vital organ has its special representative in the corps of teachers.

Thus time and the student's purse, are the sole limits to the amount of mental pabulum he may absorb. America has been credited with the worship of the "mighty dollar." The Vienna *docent*, with some honorable exceptions, has, however, quite as keen an appreciation of its value. With it, everything can be done, and the most unheard of advantages obtained; without it, the student will live on meagre diet, and will be forced to pick what he can in the crowd of six hundred jostling students.

Two questions will be of interest to those contemplating a pilgrimage to this city. What is the probable expense? secondly, is a knowledge of German necessary? If he has a rudimentary knowledge, such as is acquired in schools, and if he will devote the first months of his stay to study and practice, he can get along very well. He would find a complete ignorance of the language a great drawback, although he can still profit a good deal by using his eyes; and some of the teachers have a limited stock of English.

The expense will vary with the habits and tastes of the individual; as a mean estimate, I may say:

Traveling expenses, from New York to Vienna,	-	\$120.00
A comfortable furnished room, with fire and		
attendance, (monthly),	- - - - -	10.00
Day board at a good students restaurant,		
(monthly),	- - - - -	\$20.00 to 30.00

To this must be added the expense of the private classes which vary from \$5 to \$12, for six weeks time. Many spend a great deal more than this, but on the other hand, there are others who live for far less.

The students attending the university are truly a cosmopolitan crowd. The large majority are Austro-Germans, and natives of the twenty-five different provinces included in the Austrian Empire. America furnishes the largest contingent of foreigners, and Norway, Sweden, Germany, France, Italy, Russia and England, are well represented in numbers.

In thoroughness and devotion to study the Northmen, bear off the palm; their long university course and training accomplishes this. They possess a certain quiet dignity, and have at the same time so much good humor and suavity, that they are general favorites. The North Germans are often reserved, arrogant and unsociable, acting as if the memory of Sadowa, was continually before their minds, whilst their brethren of South Germany and the Austro-Germans are the most companionable of fellows.

The Hungarians are a noisy, excitable race. To see a number discussing a trifle at a café, an onlooker would suppose a first-class row imminent, and will be surprised the next moment to see the principles engaged in the exciting game of dominoes.

The English students, are, as a rule, earnest workers and pleasant companions, although an occasional cockney will be found amongst them.

What shall I say on that most delicate of subjects, our own countrymen. They may be broadly divided into two classes. Those who come for study, and those to whom pleasure is the main object. The former are pushing, energetic workers, putting in their time for the greatest benefit in the shortest time.

To the man with plenty of money, Vienna offers the great advantage of combining pleasure with study. Some of our countrymen do not waste such opportunities, and their faces are quite as well-known to the light-hearted maidens of the *Sperl* and the *Bal Masque*, and to the waiters in the concert-gardens, as to the grave and sedate professors and *docents*. An occasional row with the police, sustains our national reputation, for pugnacity and contempt of officials.

Americans are, as a rule, favorites with the professors and *docents*, for it is by their *ducats*, generously expended, that many of the latter keep the wheels of life well greased. By the native students, they are not held in such favor, and this is not surprising, for they fill up the best private classes, which are limited in number of students admitted, and when a native or a German wishes an occasional class, he finds the list full of Americans, enrolled for many months.

There have been several changes among the professors of the University, during the past few years. The memory of Oppolzer, the great teacher of clinical medicine, still lingers about his

old wards. Scoda, prostrated by disease, has retired from active duties, and their places are filled by Bamberger and Duchek. Both are excellent teachers, as far as diagnosis and symptomatology, are concerned. The less said about therapeutics, the better; for, according to American ideas, Vienna is no place to study it. A diagnosis, verified by a post-mortem is the height of medical glory. Hebra is off duty, his place being filled by Kaposi.

Bilroth still continues to draw his crowds of admiring students, showing what brilliant results can be accomplished by a seeming careless use of the knife, when guided by profound knowledge and the greatest skill. I had the honor of witnessing a private operation of Bilroth's, for the removal of the fetus, in a case of tubal pregnancy. The history of the case, and the operation, may be of interest.

The woman became pregnant three years ago, and went, probably, to near full term; the sounds of the fetal heart were heard. In 1868, she consulted Prof. Braun, who advised a postponement of the operation as long as possible, as giving the best chances of success. She appeared again, a few days ago, and said she would rather die, than suffer as she was doing. She had had two severe attacks of peritonitis, caused, as Bilroth and Braun said, by partial rupture of the sack, and escape of the fluid. She was in continual pain. The operation was performed in a room with a temperature of 84° Fah. The steam spray, using one-tenth of one per cent. solution of thymol, was employed, playing on the wound during the whole operation. An incision, five inches in length, was made, from the umbilicus downwards, which had afterwards to be enlarged. The tumor seemed to be everywhere adherent. He tore loose the adhesions in front, but before cutting, tied portions with fine carbolized silk thread, which were cut off short. A towel was then packed in each side, between the tumor and the abdominal walls. After further tearing the adhesions, he tapped the sack with a trocar, and drew off nearly two gallons of dirty, yellowish fluid. The tumor was then removed, and the pedicle tied. There was little bleeding during the operation.

Three drainage tubes were inserted, and the wound was closed by silver wire sutures, inserted one and one-half inches from the cut and carried through the peritoneum. The wires

were fastened by flat pieces of lead and shot. The arteries were tied with fine carbolized silk thread, and no cat-gut was used; and the thread, cut short, was left in the abdomen. Many stitches were taken in the skin, and the wound dressed according to Lister's method.

The sack removed, had a small cyst in the lower portion, which contained fluid. The child was near normal size, and was quite perfect, although having undergone fatty degeneration. Its hands, fingers, and feet could plainly be distinguished. The bones of the head were loose. The attachment of the placenta could be plainly seen. The woman is doing well;—(three days after the operation.)

Bilroth is not an enthusiast for the spray. He thinks it more trouble than it is worth, and says he does not expect to use it next term. He considers the Lister dressings sufficient. He says, you can soak bacteria in a two per cent. solution of carbolic acid, for forty-eight hours, and not destroy them. I saw him, lately, open a knee-joint without it. During the early part of the winter, good results were claimed for it, but during the last two months, everything has been unfavorable.

I shall close this letter, which is already too long, with a notice of a specimen I lately saw at the Vienna Medical Society—a heart without a pericardium. Simply a trace was found attached to the posterior surface of the great vessels. Dumreicher stated that only two such cases had been noticed here, among seventy thousand post-mortems.

MEDICUS.

COMMUNICATIONS.

THE STATE ASSOCIATION.

Messrs. Editors:—With the time at hand for the annual meeting of the Medical Association of the state of Missouri, it occurs to us to ask if the profession of the state, including the entire mass of thinking doctors, not merely those who dutifully attend the annual meetings, have ever thoughtfully considered the questions: What ought our State Society to be? What are its proper duties, and how broad its field of action?

In an admirable address, by Dr. Edmund P. Gaines, President of the Medical Association of the State of Alabama, is stated a truism that, perhaps, rarely occurs to the thought of the busily occupied practitioner; it is that, whether we will or not, we are born to responsibilities that no voluntary decision or act can relieve us of. "The great responsibilities of life no man chooses. They are imposed without his consent asked." "He finds himself *born*, a citizen (let us say) of the United States. * * * This citizenship, and all its duties, all its privileges, and all its obligations, are laid upon his shoulders, *whether he will or no.*"¹ These duties and obligations run through the whole rôle of life and in every special form of life. And if by our own selecting we take up the onerous profession of medicine, we assume, *nolens volens*, all the duties which are attached to it, and which under advanced knowledge and improved conditions of civilization, are become more extended and of greater general importance than they were in the past.

As a matter of course we may neglect the fulfilment of these duties, but may we do so without incurring the deserved reproach of our fellow citizens, our successors and our own consciences?

1 "First Principles;" by Hugh Miller Thompson, D. D.

There is no department of medicine of so vast importance to the present and future of our state and of the world as that which has received the name of "State Medicine and Public Hygiene." Not only does it engage the entire attention of the ablest men, but governments have been compelled to recognize its value and necessity, and year by year appropriate sums of money for the proper execution of laws developed by investigators, and for the prosecution of investigations in respect to the preservation of the public health.

The matter of state quarantine may become a question of very serious import to us, and to whom could it be referred? What body is there properly prepared or legally qualified to decide upon or suggest the propriety, necessity or method of carrying such a method into operation? Must we always depend upon popular feeling or sentiment, compelled either by the excitement of a panic or by commercial interests of those perhaps not at all interested in our local health or safety? A properly organized Board of Health for the state as well as for the cities of the state, can only be brought into existence from the medical men of the state, selected, not by politicians but by those only fitted for the selection, whose duty it is to direct the sanitary interests of the state. In order to do this it is not necessary that the state should put into the hands of a medical association any powers, but did the body exist as it ought and might, its influence and authority would be of such a character that its suggestions could not be overlooked, nor would they; self-interest would soon direct the governing bodies to the most reliable source of information for advice.

We are very earnestly calling immigrants to our state, whose broad and fertile lands hold such tempting promise of great fruitfulness to those who will seek its boundaries, but what are the first questions asked? Its wealth of ore, its rich soil are known; the first and all-important questions are, What is its sanitary condition? What sicknesses occur? Do epidemics or endemics poison its atmosphere? Are its streams uncontaminated? What sanitary laws, if any, exist?

There is but one authority of any value on these subjects—there is but one proper source of knowledge, and that is the medical profession—not the opinion of any one man—not the theoretical opinion of any set of men—nor even the agreed opinion of a number of men—but the statistical knowledge ob-

tained from men empowered to gather it, in every portion of the state, collected, collated, sifted and arranged by a carefully selected, intelligent jury, which can only be such a state medical association as may be organized in our state if only every one would recognize and fulfill the duties and obligations that have been imposed upon him by birth, by citizenship, by selection of his profession. Let every county organize a society that shall include all the good members of the profession in the county; let it appoint the best adapted to report upon the special topics of public health, including topography, climate, prevailing diseases, histories of epidemics, etc., and let each one so appointed take worthy pride in preparing an exhaustive report upon his subject. A few days of labor at home, a few extra hours of study, which will repay him by the enhancement of his knowledge gained in the preparation, and a week in the year at the annual meeting, will be the only time required. Such work will soon make state associations a power that will be felt, and if sanitary laws be required, the Legislature cannot refuse to adopt measures founded upon such a system of investigation, suggested by an association composed, not of a few physicians gathered for self-improvement and social intercourse, but of the profession of the whole state, represented by its best men, who are laboring not only for the advance of science but for the security of health and life, and consequently for the enhancement of wealth and the increase of population. "Vital statistics serve alike to guide the resident and the immigrant, the capitalist and the laborer, the politician and the statesman, the moralist and the scientist." ¹

The state government can not and should not take any step in the collecting of vital statistics except by such methods and through such agencies as are prepared and suggested by the only citizens of the state who are qualified to present them; and this can only be effectively done through and by a State Medical Association, organized after a good working model and including the whole state. We hope that at the coming meeting some steps will be taken tending toward the completion of such an organization, that we may soon commence to add our share of information on the subjects which are being so

1 Dr. Chaille: "Address on State Medicine." Tr. Am. Med. As.

thoughtfully considered by the scientists of the world, to the elucidation of which every well established fact, every particle of positive knowledge is of the utmost importance.

G. A. MOSES.

INQUIRY—THE POSTURE OF WOMEN DURING LABOR.

The following note will speak for itself; hence we give it as received, trusting that there may be some among our readers or our exchanges, who will aid the investigation, by communicating to Dr. Engelmann such information in regard to the point in question as they may be possessed of:—Ed

Messrs. Editors:—I should be greatly indebted to you if you could assist me in obtaining some information with regard to a subject in which I am now interested—the *Posture of Women in Labor*.

In civilized communities of the present day, women are delivered in their beds—mostly on the back, sometimes on the side; other methods, and especially the obstetrical chair, have been done away with long ago; but not so a rather peculiar custom which antedates the obstetrical chair—the delivery of a woman while seated on the lap of an attendant.

This was the practice among various nations a thousand and more years ago, and is still customary in some portions of Mexico, of Peru and Chili, in the interior of Wales; and in the early part of this century it was a favorite method of delivery in parts of West Virginia.

Other equally peculiar postures are in other countries assumed by women during labor, and I am anxious to collect all possible information which I can obtain with regard to the method of delivery, especially the posture occupied during labor among all such people as are not yet governed by the modern laws of obstetrics—our present Indians, the natives of South America, Africa, and the people living in mountain districts in the interior of those portions of the old world which are not as yet attacked by all the accompaniments of modern civilization.

A circular letter asking such information, will soon be sent out to the medical officers of the army, by the Bureau of Ethnology of the Smithsonian Institution; but I have no doubt that among your readers, also, there are many who have observed curious positions occupied by women in labor. I would be thankful to these, if they would place me in possession of such facts as have come to their notice.

Trusting that you may give me some assistance in this matter,
I am, yours, etc.,

GEO. J. ENGELMANN, M. D., 3003 Locust street.
St. Louis, May 4, 1880.

BOOK REVIEWS AND NOTICES.

THE PRINCIPLES AND PRACTICE OF GYNÆCOLOGY. By THOMAS ADDIS EMMET, M. D., Surgeon to the Woman's Hospital of the State of New York, etc. Second edition thoroughly revised with one hundred and thirty-three illustrations. Philadelphia: Henry C. Lea. 1880; pp. 875. (Through Hugh R. Hildreth Printing Co.)

Within a year from the appearance of the first, there seems to have been necessity for a second edition of Dr. Emmet's valuable contribution to medical literature; and during the interval the work has undergone a most accurate revision, much of which is only to be detected by the closest scrutiny. Assertions of opinion have been modified, and phraseology improved. Some unimportant cuts have been omitted, and many of the illustrations, representing pelvic postures especially, have been given better positions.

Very important instructions have been printed in capitals, so that attention must be arrested.

On page 80 of the first edition, a double vagina was said to be divided by a "fissure" instead of "septum;" other such evidently accidental errors are corrected in the new work. We hoped that the author would see good reason for omitting his distinction, entirely arbitrary and confusing, between "fibroid" and "fibrous" tumors, but he has not done so.

Chapter XIII. on Pelvic Cellulitis, is improved by the contrasting of the opinions of the best known authors who have heretofore described the same disease under different nomenclature.

Inverted uterus is treated of at more length, new cases and methods are reported, while the discussion of priority in the matter of Viardel's method of reduction, contrasted with the author's, is omitted.

The first section of the chapter on "Malignant Growths" is completely rewritten. The theory of local origin of cancer of the uterus is adopted and the classification extended.

Dr. T. G. Thomas' method of enucleation of interstitial fibroids by the use of the "serrated scoop" or "spoon saw" is given, as is also an abstract of Professor Hegar's paper on "Female Castration" for the arrest of these growths.

Case XLVI. is a new and very valuable exemplification of the skill and perseverance of the author. It reports an operation for the formation of a urethra where this canal was congenitally absent.

The author's ingenious device for curing prolapse of the urethral mucous membrane, has been put to a successful test since his first edition, and now we have the procedure described from the experiment.

The result of the further prosecution of Battey's operation (as given in the *American Journal of Obstetrics*, Jan. 1880, and quoted by Dr. Emmet) in 120 cases, and the author's personal observation lead him to adhere to the wise conservative views expressed in the former edition, except that he extends his approval to the operation for the arrest of hemorrhage from fibrous tumors, but "for nervous disturbances which present more of the hysterical element, the operation should never be thought of."

The author has accomplished a most important work, and has conscientiously reviewed it after evidently careful study of his critics.

The typographical execution is excellent, the type so clear that it is a pleasure for poor eyes to rest upon the pages.

G. A. M.

A MANUAL OF PATHOLOGICAL HISTOLOGY. By V. CORNIL, Assistant Professor in the Faculty of Medicine of Paris, and L. RANVIER, Professor in the College of France. Translated with notes and additions by E. O. SHAKESPEARE, A. M., M. D., Microscopist to the Philadelphia Hospital, etc., and J. HENRY SIMES, M. D., Demonstrator of Pathological Histology in the University of Pennsylvania, etc. With three hundred and sixty illustrations on wood. *Philadelphia: Henry C. Lea.* 1880. 8vo; pp. 784. (Through Hugh R. Hildreth Printing Company).

Those best acquainted with the objects of histological study and the means to be adopted in the pursuance of that study, most clearly recognize its considerable difficulties, yet its importance is such that no physician desirous of being truly well informed in his profession, can neglect to note the discoveries already made.

This book aims to present "a brief, elementary, and succinct explanation of the descriptions, definitions, and classifications of morbid products as seen under the microscope." Part I. contains a description of the cell and normal tissues together with a study of general pathology, *i. e.*, the various forms of degeneration, inflammation, tumors. Part II. is devoted to the lesions of each of the tissues and systems, while lesions of the different organs and apparatuses occupy Part III. A brief description of normal histology introduces each chapter. A useful bibliographical index is appended.

The work fills an important place in medical literature. It is an encyclopedia of histology, omitting the purely technical. The plan adopted by the American editors, of correcting the French authors by introducing new matter in parentheses in the text where required, is attended with some inconvenience. For example, p. 99, an account is given of the mode of production of the carcinomata, which are stated to arise from cells developed in a newly formed fibrous or connective tissue. The editors on another page explain that this view, held in 1869, is not in accordance with that held by most of the pathologists of the present day, who believe that carcinomata spring from glandular and epithelial cells. A foot-note referring to an appendix at the back of the book would save time and annoyance.

The editors have failed to correct a misstatement of the theory of Virchow in regard to the origin of tumors, p. 74, "Virchow adds that they are derived from the cells of the connective tissue." Virchow in his famous work on Cellular Pathology, 1871, expressly defends himself against this charge. *Cell.*

Path. p. 391—"Strangely enough some declare that my whole theory of neoplasms is based upon the connective tissue; out of that only do I admit that the new elements proceed. At no time have I made such a statement. I have always recognized the formative properties of the epithelial structures; I was the first to describe the processes consequent upon irritation occurring in the primitive muscular fasciculi and the capillaries, and characterized by multiplication of the nuclei; in addition, at a time when the colorless blood corpuscles were still greatly overlooked, I referred to them the organization of the thrombus." This defence of the great German should not have been disregarded. Virchow's law, *omnis cellula e cellula* is accepted as true, however, and forms the basis of the author's pathology. It is also difficult, in view of Virchow's description of bone development, to appreciate the criticism that Virchow, "believes that osseous tissue arises by nutritive changes of fibrous and cartilaginous tissue, occurring especially in the fundamental substance which is hardened by calcareous salts." Virchow states, *Cell. Path.* 1871, that osseous development out of fibrous (periosteal membranous) tissue and cartilaginous, takes place through the complete transformation of the fundamental (inter cellular) substance into osteoid tissue with subsequent calcification, the bone corpuscles originating either directly (comparatively rarely) from cartilage cells, or indirectly from them, and the periosteal cells after their proliferation. A classification and condensed description of tumors based upon Virchow's histogenetic schema, is introduced by the editors, which is valuable as being philosophic and readily applied. The history of tubercle is brought up to date by abstracts from the latest authorities including Dr. Woodward, U. S. A., in the last issue of the *Med. and Surg. History*. The infectious nature of tubercle is accepted; early extirpation of scrofulous glands is advocated, to anticipate self-infection; the virus may first attack the lymphatics, giving rise to tubercle granulations, local tuberculosis, or it may pass into the general circulation and produce general tuberculosis; it is not impossible that consumption of the flesh and milk of tuberculous animals may result in tuberculosis.

In the section on intestinal lesions, free use is made of the clear and distinct illustrations published by Dr. Woodward in the *Med. and Surg. History*. The illustrations of the text are

full and distinct so as to afford a rapid and satisfactory view of the principle lesions as seen under the microscope. The section devoted to cutaneous lesions is not as complete as those preceding, probably because of the number of elaborate works already published.

The book well fulfills the object of its authors, and last, though not least, it is printed with sharply cut type on excellent paper.

C. A. T.

THE ESSENTIALS OF ANATOMY, designed as a Text-Book for Students, and as a book of Easy Reference for the Practitioner, by WILLIAM DARLING, M. D., F. R. C. S., Professor of Anatomy in the Medical Department of the New York University; and AMBROSE L. RANNEY, A. M., M. D., Adjunct Professor of Anatomy, in the Medical Department of the New York University. *New York: G. P. Putnam's Sons, 182 Fifth Avenue.* 1880. 8vo., pp. 629. \$4.00. (Through St. Louis Book and News Company).

With this title page, another work on human anatomy is presented to the medical profession, one which, while not containing any fact or theory, discovered by or original with the authors, is unquestionably destined to occupy an important place among anatomical works of acknowledged worth and renown. As the authors state in the preface, this book is not intended or expected to rival or supercede such master-works as Hyrtl, Quain, Gray, etc., but to be an auxiliary to more exhaustive treatises, and to present as clearly and concisely as possible, such anatomical facts as to them appear essential.

In their general introduction, we find a table exhibiting the more important divisions of anatomy, and a diagrammatic illustration representing the various parts of the human frame, which demand the attention of the student of anatomy. The work is divided into the following six parts, viz.: Osteology, Arthrology, Myology, Angiology, Neurology and Splanchnology. After an enumeration, in the first part, of the bones which form the skeleton, a classification according to their shape, an explanation of the meaning of names applied to the various prominences, depressions and cavities; a short, very clear and exact account of the minute anatomy and chemical composition of bone, precedes the descriptions of the individual bones. It is probably unnecessary, in a review of a book of this kind, to follow the authors from page to page, or chapter to chapter, since nothing new being offered, in point of fact, it is only the peculiarity of the treatment of the sub-

ject matter, which enlists our attention. From almost every page we may recognize in the author, the practical teacher, ever ready, by some devise, table or illustration, to secure a live interest in, and ready comprehension of facts, at a first glance, dry and unimportant.

A great number of the tables are of real value, both to the student and practitioner of medicine, and evince in their arrangement a good deal of original thought. Altogether the authors have succeeded in selecting, from the great mass of anatomical facts such as are really essential, and presenting them in such acceptable form, as to make their book preëminently valuable to every medical student. The paper, print and general appearance of the volume, reflect credit on the publishers.

H. T.

THE STRUCTURE AND OTHER CHARACTERISTICS OF COLORED BLOOD-CORPUSCLES. By LOUIS ELSBERG. (Annals of N. Y. Academy of Sciences vol. I. No. 9 and 10). New York: G. P. Putnam's Sons. 8vo; pp. 49. 25c.

The author measured and observed the red blood-corpuscles, chiefly of man, when treated with solutions of bichromate of potash. For this reagent he claims that it does not alter or seriously impair living matter, and concludes that certain structural arrangements revealed by his method were pre-existing, and not artificially produced.

The measurements tend to show that human colored corpuscles vary greatly in size in the same individual. The same result has been obtained by many observers, and it is becoming certain that we cannot, by their size, distinguish the human blood-corpuscles from those of certain other mammals.

In regard to structure, the author concludes that the structure of protoplasm—the existence of a network of contractile fibres—as developed by the researches of Heitzmann and some others, may be predicated of blood-corpuscles also; that these corpuscles are not “cells” in a proper sense, but “unattached portions of living matter (bioplasyon);” and that they have no separate investing membrane.

Copious quotations from literature, and a plate of drawings of the appearances observed, illustrate the text.

We have not been able to discover a *raison d'être* for the word bioplasyon, which adds nothing to the well-understood term protoplasm, except a hypothesis.

G. B.

SORE THROAT; ITS NATURE, VARIETIES AND TREATMENT; including the connection between affections of the throat and other diseases. By PROSSER JAMES, M. D., Lecturer on Materia Medica and Therapeutics, at the Lying-in Hospital; physician to the Hospital for Diseases of the Throat and Chest, etc. Fourth Edition. Illustrated with hand-colored plates. *Philadelphia: Lindsay & Blakiston.* 1880. 12mo.; pp. 318. Cloth, \$2.00. [Through Hugh R. Hildreth Printing Company.]

The fact that this book has run to a fourth edition is evidence of its popularity. The author, one of the oldest, if not the earliest laryngoscopist in Great Britain, has published several works on the throat, and this last seems to be about the best. It is written in a popular style, and is full of practical hints that will be fully appreciated by the practitioner.

There have been several changes, and an evident improvement on the earlier editions. Fresh chapters on Syphilitic Sore Throat, Affections of the Naso-pharynx, and Affections of the Œsophagus, have been added. Taken as a whole, the book, although it can not be compared with the classical American work of Dr. Cohen, will be found of value to the busy practitioner, and will, perhaps, be more appreciated than a more scientific treatise.

The lithographic plates add little to the value of the book, and are far inferior to those of recent continental works.

ARCHIVES OF DERMATOLOGY, a Quarterly Journal of Skin and Venereal Diseases. Editor: L. DUNCAN BULKLEY, A. M., M. D. Collaborators: Drs. Alexander, Bronson, Campbell, Delavan, Derby, Keyes, Lefferts, Robinson and Seguin, of New York; White and Wigglesworth, of Boston; Duhring and Van Harlingen, of Philadelphia; Hyde, of Chicago; Atkinson, of Baltimore; and Hardaway, of St. Louis. *Philadelphia: J. B. Lippincott & Co.* Vol. VI., No. 2. April, 1880.

This admirable magazine, for which we are indebted to the talent and industry of Dr. Bulkley, of New York, is now in its sixth volume, and has exhibited a steady improvement in size, and character of contents, from the beginning. It is the only scientific journal now published in the English language, devoted exclusively to skin and venereal diseases. It compares, more than favorably, with the continental quarterlies of a like character. The digest department of Bulkley's Archives, is a model of crisp analysis and laborious research. This journal is not only of value to the specialist, but really indispensable to the general practitioner.

COMMON MIND-TROUBLES, AND THE SECRET OF A CLEAR HEAD. BY J. MORTIMER-GRANVILLE, M. D., M. R. C. S., etc. Edited with additions by an American Physician. Philadelphia: D. G. Brinton, 115 South 7th St. 1880. 12mo.; pp. 125.

In the editor's preface, he says that the author of this little work has not hitherto been introduced to the American public. For one we feel very grateful to Dr. Brinton for bringing about this introduction. It has been a great pleasure to read the successive chapters of the book, and profitable as well.

When a book that lays no claim to sensational interest such as pertains to the modern novel, meets with a sale of thousands of copies, as this has done in England, it is safe to believe that it must possess merit.

The aim of the author has been to give such information and to make such practical suggestions as shall enable the reader to guard against and obtain relief from the mind-troubles which are so exceedingly common in these days.

Mens sana in corpore sano should be the motto of every worker; and the man who helps another to help himself in securing the healthy mind and healthy body which are essential to the performance of successful work, has himself accomplished a good work.

This book is one which may be read with profit by all, and we trust that it will secure a wide circulation among the American people.

CLIMATIC MAP OF THE EASTERN SLOPE OF THE ROCKY MOUNTAINS, Compiled from the United States Signal Service and Medical Reports, Geological Surveys, and Individual Observations by CHAS. DENISON, M. D., *Denver, Col.*

The thanks of the medical profession are due to Dr. Denison, for this most useful and important map. He has collected a great many scientific data, concerning Colorado, including observations on the temperature, humidity, prevailing winds, amount of sunshine, and elevation above the sea, of the different places.

The study of the climatology of the United States, is still in its infancy, but accurate observations and statistics, such as made by Dr. Denison, in Colorado, if repeated in other sections, will place the subject on a scientific basis, and give the foundation for a general work embracing the different climates of the country.

THE STUDENT'S MANUAL OF VENEREAL DISEASES, BEING THE UNIVERSITY LECTURES DELIVERED AT CHARITY HOSPITAL, B. I., DURING THE WINTER SESSION OF 1879-80. BY F. R. STURGIS, M. D., Clinical Lecturer on Venereal Diseases, in the Medical Department of the University of New York, etc., etc., etc. *New York: G. P. Putnam's Sons.* 1880. 16mo. pp. 196. \$1.25. [Through Hugh R. Hildreth Printing Company.]

This little volume contains a number of lectures on the chancre, syphilis and gonorrhea. Some of the striking facts in venereal diseases are very well brought out. We are glad to note that the lecturer condemns cauterization of the initial syphilitic lesion, unless it should be attacked by phagedena. The unwise habit of boring into all suspicious looking sores with caustics does no good under any circumstances—even should the ulcer prove specific—obscures the diagnosis, and oftentimes converts insignificant sores into deep ulcerations. We also coincide with Dr. Sturgis in what he terms a general law, viz.: “Do not treat the initial lesion by the internal use of mercury, but await the development of secondary symptoms.” We presume that it is not claimed for this book that it represents anything more than a course of such lectures as might be delivered to a class of students; for the information conveyed is of the most elementary sort. However, since what is said, so far as it goes, is in the main accepted doctrine, the very dogmatic way of saying it may, perhaps, prove of service to the beginner. The literary execution is not particularly felicitous, but this is owing, no doubt, to the colloquial style employed.

W. A. H.

HEADACHES; THEIR NATURE, CAUSES AND TREATMENT. BY WILLIAM HENRY DAY, M. D., Member of the Royal College of Physicians of London, etc. Third edition, with illustrations. *Philadelphia: Lindsay & Blakiston.* 1880. 12mo.; pp. 322; cloth, \$2.00. [Through St. Louis Book and News Co.]

This work of Dr. Day has already been so favorably recognized by the profession that scarcely anything more is necessary now than to call attention to the fact that a third edition is ready. The author has added a few pages in this edition, but it is essentially the same as those preceding.

There are few individuals in these times who do not suffer more or less from headache, and the physician is often called upon to consider it both with reference to the direct suffering and also to its import as a symptom of disease.

Of special interest and importance is the last chapter, in

which he discusses the headaches of childhood and early life. "There are few practitioners of any experience who have not had reason to lament the overlooking of the first symptoms of brain mischief in a young child."

The book is one which young practitioners may read with interest and profit, and from which those of considerable experience will glean suggestions that will be very helpful to themselves and their patients.

PHOTOGRAPHIC ILLUSTRATIONS OF SKIN DISEASES. BY GEORGE HENRY FOX, [A. M., M. D., Clinical Professor of Dermatology, Sterling Medical College, Surgeon to the New York Dispensary, etc., etc. Forty-eight colored plates taken from life. *New York: E. B. Treat.* Parts 7, 8, 9, 10, 11, 12.

The very excellent illustrations of skin diseases given to the profession by Dr. Fox come to a conclusion with Part 12. Many, we may say most, of the photographs have been faithful and artistic pictures, well calculated to promote a knowledge of the diseases depicted; some few of the illustrations, we regret to observe, are quite inferior. The accompanying text is of the greatest value to the student, showing wide information and much practical therapeutical acumen on the part of the author. The publisher announces a series of illustrations on cutaneous syphilis, to be edited by Dr. Fox. As the work will entail a vast amount of painstaking labor and no inconsiderable financial outlay, we trust that the author will meet with that amount of substantial encouragement which the undertaking now completed has shown that he deserves.

W. A. H.

CHEST EXAMINATION CHART, designed by CHAS. DENISON, M. D., *Denver, Col.* Chiefly for the purpose of studying lives impaired by chronic pulmonary diseases, with a view to the adaptation of climates to their especial needs. For the use of life insurance companies, physicians, and inquiring invalids.

Dr. Denison has certainly produced a most thorough and elaborate chart, far superior to those in use by life insurance companies. Some of his details will seem trivial, but grouping them together, they form a most complete history of an individual life. We can especially recommend it to physicians who, on sending their patients to a distance, wish to send also a statement of their actual condition.

BOOKS AND PAMPHLETS RECEIVED.

LECTURES ON THE HUMAN EYE, IN ITS NORMAL AND PATHOLOGICAL CONDITIONS. By Adolf Alt, M. D., Lecturer on Ophthalmology and Otology, in the Trinity Medical School, Toronto, Canada. With ninety-five illustrations by the author. *New York: G. P. Putnam's Sons, 182 Fifth Avenue.* 1880. 8vo., pp. 208. Price, \$3.00. (Through the Hugh R. Hildreth Printing Company).

PHARMACOLOGY AND THERAPEUTICS, OR MEDICINE PAST AND PRESENT. The Goulstonian Lectures delivered before the Royal College of Physicians, in 1877. By T. Lauder Brunton, M. D., F. R. C. P., F. R. S.; Assistant Physician and Lecturer on Materia Medica and Therapeutics, at St. Bartholomew's Hospital. *London: Macmillan & Co.* 1880. 12mo.; pp. 212. Price, \$1.50. (Through the Hugh R. Hildreth Printing Company.)

ANNUAL ANNOUNCEMENT OF THE MEDICAL COLLEGE OF THE PACIFIC. Being the Medical Department of University (City) College, San Francisco. Session of 1880. *San Francisco: Alta California Print.* 1880.

ON A CASE OF MOLLUSCUM VERRUCOSUM, PRESENTING CERTAIN UNUSUAL FEATURES. By James Nevins Hyde, A. M., M. D., Professor of Dermatology, Rush Medical College, Chicago, Ill. Read at the Third Annual Meeting of the American Dermatological Association, in New York, 27th August, 1879. *Edinburgh: Oliver and Boyd.* (Reprint from the *Edinburgh Medical Journal* of February, 1880.

THE CINCHONA CURE FOR INTEMPERANCE. By Chas W. Earle, M. D., Professor of Diseases of Children, Woman's Medical College, etc., Chicago. Reprint from the *Chicago Medical Journal and Examiner.* February, 1880. *Chicago Bulletin Print, 106 Madison Street.* 1880.

ON THE REMOVAL OF FOREIGN BODIES FROM THE EYE, WITH FOUR CASES. By Chas. Stedman Bull, M. D., Surgeon and Pathologist to the New York Eye and Ear Infirmary. Reprinted from the Archives of Ophthalmology. March, 1880.

VALEDICTORY ADDRESS TO THE CLASS OF THE JEFFERSON QUIZ ASSOCIATION, at the Philadelphia School of Anatomy and Surgery, March 10, 1880. By John V. Shoemaker, A. M., M. D., etc. A History of the Origin and Growth of the Jefferson Quiz Association, etc. *Philadelphia: Collins, Printer, 705 Jayne Street.* 1880.

TRANSACTIONS OF THE SOCIETY OF THE ALUMNI OF THE MEDICAL COLLEGE OF OHIO. *Cincinnati: The Cincinnati Lancet Press Print.* 1880.

OUR HOMES. By Henry Hartshorne, A. M., M. D., formerly Professor of Hygiene, in the University of Pennsylvania. *Philadelphia: Presley Blakiston, 1012 Walnut Street.* 1880. 12mo.; pp. 150. Cloth, 50 cents. [American Health Primer] (Through the Hugh R. Hildreth Printing Company).

A PRACTICAL HAND-BOOK OF MEDICAL CHEMISTRY, applied to Clinical Research and the Detection of Poisons, partly based on "Bowman's Medical Chemistry." By Wm. H. Greene, M. D., Demonstrator of Chemistry in the Medical Department of the University of Pennsylvania, etc., etc. *Philadelphia: Henry C. Lea's Son & Co.* 1880. 12mo.; pp. 310. Cloth, \$1.75.

THIRTY-NINTH ANNUAL ANNOUNCEMENT OF THE ST. LOUIS MEDICAL COLLEGE, Seventh and Myrtle Streets. Winter Session, 1880-81, and Catalogue for 1879-80. *St. Louis: Presbyterian Publishing Company Print.* 1880.

DISEASES OF THE MAXILLARY SINUS. By Edward Borek, M. D., Member of the Medical and Surgical Faculty of Maryland, and Baltimore Medical Association, etc., etc., of St. Louis, Mo. Reprint from *Indiana Medical Reporter*, Evansville, Ind., April, 1880.

THIRD REPORT OF THE PENNSYLVANIA FREE DISPENSARY FOR SKIN DISEASES, No 920 Walnut Street, Philadelphia. From November 1, 1878, to January 1, 1880. *Philadelphia: Collins, Printer, 705 Jayne Street.* 1880.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL
SOCIETY.

Stated Meeting, March 18, 1880. Dr. L. Ch. Boisliniere, President, in the Chair.

Discussion on Dr. G. A. Moses' paper on Surgical Treatment of Malignant Diseases of the Uterus. (See page 443).

Dr. Maughs.—The worst case of hemorrhage I ever had, was after the use of the electro-galvanic cautery. The bleeding was persistent, and as Dr. Yarnall knows, we were very careful in the operation, yet it was followed by almost uncontrollable hemorrhage, and the secondary hemorrhage is always the worst, I think. I have had several hemorrhages follow the use of the electro-galvanic cantery. In the removal of the cervix uteri, I have avoided opening the abdominal cavity, because I knew it had been done, and to know that was to avoid it. As I have said, the worst case of hemorrhage I ever saw followed the use of the electro-galvanic cautery. The patient got well, however, and the last time I heard from her, she was still well. That woman's life was prolonged possibly years by the operation. In ordinary cases I would remove the cervix with the ecraseur, or with a curette, scrape it thoroughly, hollow it out like a cone. In one case I scraped it until I was almost afraid I should penetrate the anus. I am decidedly in favor of surgical procedure in these cases, even where they are comparatively hopeless. Where the body of the womb is not involved, where the glands are not involved, resort to surgical procedure, even though it destroy the entire cervix. Scrape out the fibre of the cervix, hoping to make the condition of the woman more comfortable, if we do not cure her. For, after all, these cases have a common termination. We should prevent this and prolong life, if it is any ways possible, although it may be impossible to cure. I never saw but one case cured without surgical procedure. It was under the mastership of Dr. Clark,

at the City Hospital. That woman had an exceedingly bad condition of the cervix, with a large cauliflower excrescence almost filling the vagina, frightful hemorrhages, constant mucous discharges and violent symptoms of advanced carcinoma. We swabbed the parts with nitric acid and with a hypodermic syringe with gold-pointed needles, injected various parts of the cauliflower excrescence, at a time, with 4 or 5 drops of pure nitric acid, and that woman was discharged from the hospital, cured. The condition of the uterus grew better, and she improved in health. The diseased surface healed over. That is the only case I ever saw cured by local treatment.

I have seen a great many cases of cancer of the uterus, and they have all traveled the same road, hopeless, miserable, perishing without any arrest of the disease, unless we can do something with nitric acid or by surgical procedure. No matter how desperate the case, if all the parts are not involved, hopelessly involved, I am in favor of surgical procedure. The case operated on by the galvano-cautery, followed by severe hemorrhage, occurred some three years ago. Here is a woman, cured perhaps, a very valuable woman—well-educated and holding a high position in society—a woman whose place could not be easily filled—that must have perished of cauliflower excrescence. She is living yet, and apparently well. I know of other cases where the patients are living, one three years, and another twelve or eighteen months after the operation.

Dr. Ford.—Those cases that I have seen have all been relieved and relieved very much, but they will go in from four to six months. I have seen no favorable case where an early operation was not performed. I have always used the curette, and found it always benefited the patient, but the disease invariably returned. I thought that Dr. Moses said in his paper that in all cases, whether early or late, we should operate. I think in the early stage, life may be prolonged a great many years. At the late stage, the patient may be made comfortable and the hemorrhage stopped. I think we should resort to it under all circumstances and at all times, as the patient may get relief.

Dr. Yarnall.—Mr. President, I was called some ten or twelve years ago to the case of a patient of Dr. Gregory and Dr. Papin conjointly, where the cauliflower excrescence was as

large as my fist. We resorted to the scissors and knife, and removed as much as we possibly could. The hemorrhage was very great. We got some red hot irons and applied them, and after a little time the hemorrhage was controlled. Some four, five or six years ago, the patient made an appearance in our office; we made an examination and she was in a healthy condition. I have made use of the galvano-cautery in one or two instances, but great difficulty was experienced. In one instance we had to resort to the knife. I am inclined to think the knife is the best. In relation to that case at St. Mary's Infirmary, referred to by Dr. Maughs, in which the tumor was perfectly enormous and the woman had consequently much hemorrhage, it has been some six months since I heard her case spoken of, but she is reported to be in excellent health.

Dr. Papin.—I recollect having taken two ounces and a half, not of diseased, but of hypertrophied tissue. I mean two ounces and a half off the cervix.

Dr. Boisliniere.—Dr. Ford has had large experience with the cautery. I believe he has a preference for it.

Dr. Ford.—Mr. President, I have nothing more to say on the subject, except, that there is generally a mistake made in the use of the cautery. The wire should be red-hot, and not at a white heat. The objection to its use, so far as hemorrhage is concerned, is owing to the fact that when it is heated to a white heat, it cuts like a knife. It is well-known in ordinary surgery, that the cauterizing iron must not be at an improper temperature. The proper temperature for the purpose of staunching blood, is a red heat. It pulls off the eschar, if it is below this. If it is red-hot, it leaves the eschar there, and gives no pain. The ecraseur, I think, should never be used at all, on account of its well-known danger. I think the hemorrhage is not so much to be feared, as the opening of the peritoneal cavity. The scissors are very valuable in all these cases, but I don't think they are equal to the galvano-cautery wire. So far as I have heard, life has been prolonged from six to nine months. Some patients will live a year, and others die in three or four months. I first excise the portions most readily reached, scrape as carefully as possible the balance, and then make applications of caustic at various intervals.

Dr. Boisliniere.—I have had some experience with the use of bromine. I have used twelve drops of bromine, and one

drachm rectified, spirits of wine. With this the tumor is injected, taking care, of course, to protect the surrounding parts. I have used bromine in several instances; in one instance I am fully satisfied the life of the patient was prolonged fourteen months. The tumor shrivelled up and became perfectly white at first. I was very well pleased with bromine, on two or three occasions. I injected it into the tumor at intervals of twelve days. I presume that is far preferable to acetic or nitric acids.

Dr. Ford.—I have tried that method in two or three instances, on the same patient, and on different patients. I always found there was difficulty in injecting enough into a large tumor. It produces a very good effect, but it is only a temporary benefit. The disease returns. I injected about ten minims at a time.

Dr. Prewitt.—Mr. President, I want to say one word in this matter. What I can't really understand, is how the injections are of permanent service. What is the object of treatment in any case? It is not simply to give relief temporarily. The object is to get rid of the abnormal tissues, and those other measures are simply expedients. We can never cauterize with the hope of removing all the diseased tissue, then why not resort to operative measures? You say nitric acid, bromine, etc., give relief; but if we can remove the diseased tissue, we accomplish the object we are aiming for. We aim to destroy the diseased tissue, to eradicate it to the fullest extent we can. I can not see why these expedients, which merely modify, should take the place of the knife, curette, or some other means known to eradicate the diseased tissue. We can more certainly remove cancerous texture with the knife, than with any caustic we can use. As a rule, we can reach but a small portion with caustic. Cauterization affords only temporary relief, and it is certainly more painful than the knife.

The substances injected into cancerous tissue, exert no catalytic action by which their influence is extended beyond the group of cells directly acted upon, at the point of injection. The difficulty, in all cases of cancer, is to get beyond the infiltrated tissue into healthy tissue.

Dr. G. A. Moses.—While the dangers of the ecraseur in such cases, are well known, they can be avoided, as a rule, by proper expedients, referred to in my paper. It has occurred to me

that the chief objection to the use of the heated wire or cautery knife, is that in nearly all of these cases, in some portion of the organ, the disease extends beyond any direct horizontal incision. So far as regards the injection of caustics, etc., I think Dr. Prewitt has answered that perfectly. I have used bromine in one case. The patient had refused to have an operation and the bromine answered the very excellent purpose of alleviating the offensive discharge and hemorrhage. It is an uncomfortable thing to apply, intensely so, both to the patient and the person using it.

Concerning the extirpation of the uterus, I have no hesitation in saying, that if the disease had extended so far as to embrace an extensive portion of the body of the womb I should suggest its removal; though the cases which have been reported by these authorities, have been rather discouraging, a large number of them proving fatal, even of those performed under what appeared to be favorable auspices.

Dr. Gehrung was called upon to give a report of his late trip East.

Dr. Gehrung.—I shall not attempt to report all I saw on my recent visit East, but I shall call your attention to a few points which struck me as something new—something interesting. In a case of Battey's operation by Dr. E. Noeggerath at Mount Sinai Hospital, the first thing that attracted my attention, on entering the operating room, was a peculiar bed filled with hot water upon which the patient was lying. At the foot of this bed were two elevations like crutches, and after the patient had been placed on the water-bed, her limbs were hung over the crutches, these crutches being sufficiently elevated to raise the pelvis off the bed. The head was towards the light, the feet from it, contrary to the ordinary manner. In this way the light fell beautifully into the pelvic cavity, and illuminated it better than could have been done under any other circumstances. Another point of great interest to me, which I have mentioned already, was the hot water bed at a temperature probably a little above that of the room, somewhere between 75 and 85 degrees. I have thought long ago, from my former experience, that heat applied to the spinal column during the operation of ovariectomy would be very useful, in so far as it keeps up the circulation, and the surface capillaries constantly dilated. It keeps the patient warm, so that it would lessen con-

siderably the tendency to shock, as well as to subsequent reaction. In private conversation with Dr. Noeggerath in regard to this principle he told me that his patient so operated, suffered from very little reaction, and that their extremities never became cold during the operation. Though the patient was on the operating table two and one-half hours the pulse was quiet, the extremities had not become cold, and the reaction afterwards was so slight that it was scarcely perceptible in spite of the long time required in the operation on account of the extensive adhesions present. A week after the operation Dr. H. D. Nicoll told me that the patient was doing well.

These adhesions were probably caused at a remote period by some ovarian disease. The adhering parts surrounded the ovaries so closely that Dr. Noeggerath was obliged to remove one Fallopian tube close to the uterus, at the same time with both the ovaries. The incision was about three or four inches, nearly reaching from the pelvis to the umbilicus. Dr. Noeggerath cut rather large to get sufficient space to reach the adhesions. The water-bed seemed to cause some disturbance, as the patient was literally floated on it.

I intended to make a suggestion to this society, as I had no chance to experiment in the use of a hot water bed. This is the substitution of a bag or box or anything else containing sand. Sand (the substance I used in my former experiments) retains heat better than almost anything else. It would retain its heat four, five or six hours, at least long enough for such an operation. This would prevent that swinging motion.

Dr. Engelmann.—I was going to ask Dr. Gehrung how the water was kept hot. If the operation lasted two or three hours, towards the end of the operation it gets cold, and that would be against it.

Dr. Gehrung.—It was not really a hot water bed, it was a box nearly three feet in height, filled with a large quantity of hot water so that it would not lose its temperature very quickly, but the bed was not firm enough. I think sand or any other substance that retains heat well, would be better. After it is once heated, it would keep the requisite temperature a long time. It might be heated a few degrees above that of the desired temperature and by the interposition of blankets or pillows regulated to convey no more heat to the patient, than if it was heated to a lower degree. All the time this operation was

going on, the bowels lay wrapped in chlorinated towels on the abdomen; and the carbolic acid spray was constantly playing into the abdominal cavity. I think the use of the hot water bed prevented to some extent the hemorrhage.

The facility with which the patient was kept in anæsthesia deserves some notice. There was no difficulty whatever, even with the smallest amount of ether, in keeping up the highest degree of anæsthesia without stertor.

Dr. Moses.—Do you think the hot water had something to do with that?

Dr. Gehrung.—I think so. If heat is applied along the spinal column from occiput to coccyx, it exerts a soothing effect, and the person will soon fall asleep, probably within ten or fifteen minutes. Under anæsthesia the heat acts as a supplement and consequently the anæsthetic may be used more sparingly. Whether it renders the action of the anæsthetic less dangerous by keeping the cerebral capillaries dilated, I am not prepared to say. My experiments do not cover this part of the question. I may further mention that the so-called spaying appears to be the order of the day in New York. Among others Dr. Sims showed me a number of cases in his private practice with very fine results.

Dr. Moses mentioned Dr. Pallen's late case of Batteyism for relief of catalepsy, resulting in arrest of the catalepsy, but death of the patient.

Dr. Maughs.—It would be a blessing for her to die. I would have performed the operation. If it cures it is very good. In a case of confirmed insanity, remove the cause even at risk of life. The case as reported is certainly one which would justify the operation. I would, however, confine it to those desperate cases when anything that promises hope would be justifiable. I thought so at first. I thought so when Dr. Engelmann reported his cases, and I have not changed my opinion.

Dr. Maughs then reported a case of abscess following peritonitis; the abscess seemed not to be connected with the cavity of the abdomen. The aspirator was used, and about twelve ounces of pus removed. Several cases of pelvic abscess following the puerperal condition, had fallen under his notice.

Dr. Engelmann.—An early operation is desirable in these cases. I saw a very remarkable case about two years ago, a lady who had been treated by two homeopaths of promi-

nence, for quite a long time; finally, the midwife called their attention to the abscess, but they did not seem to consider it at all serious. When I was called for, there was a very large pelvic abscess. I did not wish to open it then, as there were several strangers present, and no other physician, so I appointed the next morning. In the mean time, the patient feeling better, attempted to get up; the abscess broke internally, and she died that night.

MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, Jan. 12th, 1880, Dr. S. G. Moses in the chair.

Dr. Todd presented to the society, a glass slide, under the microscope, with a specimen of *aspergillus nigricans*, taken from the ear. *Dr. Todd* gave the following description of the specimen: I removed that parasitic fungus from the ear of a patient, in the early part of last summer; whether it has multiplied in the glycerine, in which it was immediately mounted, I can not tell. The specimen exhibits a multitude of spores with mycelium and some fructification. This fungus is not infrequently found in the ear; sometimes it has seemed to me as though there was a sort of epidemic of it. The minute spores float in the atmosphere, with the other "germs," and falling upon a favorable nidus, sprout speedily, giving rise to a more or less abundant growth. The chronic discharge of eczema of the external auditory canal, affords a most favorable soil for this growth, also any other chronic and not excessive discharge from the ear. This is called *aspergillus*, from the resemblance of the fructification to a little brush, such as is used in the Roman Church for sprinkling the holy water. It is called *aspergillus nigricans*, from its black appearance, its growth forming a felted membrane of blackish color, sometimes lining the greater part of the auditory canal, and covering the membrana tympani.

This parasitic affection is known in science as otitis parasi-

tica. It possesses, also, other names. The disease is a very annoying one to the patient, much itching being present, besides affecting, of course, the hearing. Many remedies have been advocated; in this case I tried a very simple and convenient one. I puffed into the ear, through a suitable tube, enough powdered borax to cover the membrana tympani and adjacent wall of the auditory canal. This use of borax, so far as I know, is entirely original. It proved very efficacious. The patient called two or three days after, when the parasitic membrane was found to be pultaceous, and was readily removed by syringing, and by the forceps. This treatment is much more expeditious than any other that I have tried or read of.

Dr. Spencer.—I have employed, in the treatment of this disease, absolute alcohol, and the application has invariably effected just such relief as Dr. Todd ascribes to borax.

Dr. Todd.—The risk of aggravating the irritation, already present, has always deterred me from using that remedy.

Dr. Ford.—Have you tried boracic acid?

Dr. Todd.—No sir. I have never found any application equally effective with the powdered borax.

Dr. Ford.—It is one of the most effective antiseptics we have, and the least irritant. I use it dissolved in glycerine. I have used it for excoriated nipples, with excellent results, in combination with the tincture of benzoin.

Dr. Spencer.—We might naturally suppose that the alcohol would be an irritant, but in practice, it most certainly does not have this effect, which I am able to testify to from a large experience in its use. The immediate effect of its application is to produce considerable pain, but it is for an instant, and the after sensation is most agreeable to the patient. It effectually destroys the parasite, and the membrane promptly takes on a healthy action.

Dr. Kingsley.—Do you object to using opium with alcohol?

Dr. Spencer.—I can see nothing to be gained by adding opium. The alcohol relieves the irritation, and with every other unpleasant sensation which the patient may be experiencing.

Dr. Leete.—It will be very fortunate, if experience shows that powdered borax affords such relief in these cases. As regards boracic acid, the results are very different in different subjects

and in the same subject at different times. In a small number of applications you may be successful, and entirely unsuccessful afterwards. A very strong solution of boracic acid may be obtained by using hot glycerine.

CASE OF NON-UNION OF THE RADIUS AND ULNA AFTER FRACTURE.

Dr. Prewitt.—A man came to me some two months and a half ago, with the history that some nine weeks before he had fallen from the building on the corner of 5th and Olive streets, and fractured both bones of the forearm. He was admitted to the City Hospital, and left there of his own accord with the bones ununited. About two weeks after he left the hospital he came to me. On examination and upon questioning him, I could learn no reason for the non-union, except that while in the hospital he had no appetite and ate very little. The man looked in fair health, and is about thirty-five years old, of good physique. It is presumable, of course, that he was properly treated, that his arm was properly dressed, and was kept immobilized. I manipulated the bones and tried to start up additional excitement, so as to invite the blood to the part. After a while the radius did unite, but not the ulna. Some four weeks ago, after trying all means to invite union, I drilled between the ends of the bone, and put the arm in splints, from which, to my disgust, the man did not complain of the slightest discomfort. There was no reaction, and I feared at the time that it would not be sufficient. After waiting for some three weeks, I examined the bones and found they had not united. At the end of the fourth week, two days ago, I drilled again, and endeavored to make it much more thorough than on the first occasion. He complained a good deal for two days. It pained him very much Saturday and yesterday, but to-day there is no pain or discomfort, and I am a little uneasy about it. I fear that I may not, even now, have caused sufficient reaction to induce union. It seems extraordinary that, in a man in ordinary good health, the bones should have failed to unite. The man is eating well now, his general health is improved greatly and he looks well. It is the first instance of failure of those bones to unite under favorable circumstances that I have seen. If the splints had been badly adjusted, I could understand it.

Dr. Ford.—I recollect hearing Dr. Brainard deliver his essay on this subject before the Medical Association, in 1854. The method advocated has been quite successful, and is frequently employed now, as an alternative to the older system of driving in ivory plugs.

Dr. Leete.—Was a pretty firm union established in the case of the radius?

Dr. Prewitt.—I believe so. The head of the radius rotates thoroughly.

Dr. Leete.—If you do not get union within a reasonable length of time in the ulna, will it be advisable to break the radius and turn out the ends of the bones? I believe this has been done sometimes.

Dr. Prewitt.—I should be loath to do that. You would have to resect both bones; you can not safely turn out two parallel bones; and if you cut off any of the radius, you would have a gap.

Dr. Ford.—It is more difficult when only one bone remains ununited, than when both fail to unite.

Dr. Prewitt.—I suppose that if drilling does not answer, the next best thing would be to resort to the seton carried through between the ends of the bones. The condition of the arm does not indicate that the nerves have suffered materially?

Dr. Steele.—Where simple drilling has failed, I have passed electricity through from side to side by needles, with very good effect, using a continuous current of as many cells as could be borne, often eighteen pairs. That was in a case of deformity, in which I had occasion to make section of the bones, but they failed to unite, so resort was had to the stimulus of electricity.

FOREIGN BODIES IN THE DIGESTIVE TRACT.

Dr. ———.—I have recently observed an interesting case: A young boy was eating oysters and swallowed some hard substance. Some time afterward he was taken with an inflammation of the bowels and ulceration. He died in about ten days. A post-mortem examination was held, and I found, impacted in the vermiform appendix, a piece of solder.

Dr. Ford.—I had a case some time ago where a big negro man was eating the meat of a bear, which he had killed, and in doing so, swallowed a needle $2\frac{1}{4}$ inches long. Two days after that he came to me, suffering most intensely about the rectum;

the pain within the anus was excruciating. I introduced my finger and found a needle traversing the rectum, and fixed at both ends just above the inner sphincter. I dilated as strongly as I could with my fingers, and then put in an anal speculum and managed to remove the needle. I have seen one or two other somewhat similar cases.

Dr. Prewitt.—I was called to see the case of a young girl, who had swallowed a pin. She pointed out the position of it just below the cricoid cartilage. I first tried to touch it with my finger, but she was so unmanageable, that I was unable to do so. Then I tried to use the œsophageal forceps, but she would not let me do that. I then introduced a horse-hair probang, and when it was withdrawn, she said the pain had disappeared, although I could not say that I had withdrawn anything.

Dr. Ford.—Just before the war, I saw several cases of children who had swallowed nickels, just then a new coin. I removed them by means of the very effective and well-known metal bucket attached to a stem of whalebone. It will be recollected that the œsophagus is stretched in a vertical plane by a coin, and that the little bucket being flattened, necessarily takes the same position; upon withdrawal it almost necessarily catches the lower edge of the coin.

Dr. Kingsley.—It very often happens that when these substances that are swallowed have been removed, the sensation of their being there still remains.

Dr. Steele.—A lady called on me some time ago, whose little boy had swallowed a diaper pin. She had gone first to a druggist, who ordered oil, (a mistake too frequently made,) which she fortunately failed to give. I told her to feed bread, plenty of it. A few days afterwards the pin appeared in a lump of fecal matter.

Dr. Ford.—Some years ago I saw a case. A lady who had been sucking a piece of ice, an inch and a half in diameter, by about three-eighths of an inch thick; the ice had suddenly slipped down her throat, and rested against the epiglottis and laryngeal orifice. She rushed into the room where I was, breathless, with her arms widely outstretched. I almost instantly recognized the state of things, and placing my thumb on one side, and two fingers of the same hand on the other side of the throat, pressed very strongly against the posterior margins of the larynx, on both sides of the neck, and practically

forced out the fragment of ice, which fell upon the floor. There have been a number of cases recorded of sudden death from similar laryngeal obstruction. In one of these, a prominent citizen of Memphis, died from a large oyster sticking in the lower part of the pharynx; in another, the impaction of a large piece of beef, was the cause of death.

Dr. Leete.—A story is told of Dr. Chapman (?) illustrating the readiness of his wit, and how he never let an opportunity pass for a good joke. He was called to see a child who had swallowed a piece of coin, and was apparently strangling. He questioned the mother as to the appearance and peculiarity of the coin, at great length. The woman, who was nearly frantic at the delay and the child's apparent danger, entreated him to do something to relieve it. He comforted her by saying: "Do not alarm yourself further madam. I see, by your description, that the coin is a good one, and it will *pass*."

Dr. Hardaway cited the case of a girl, at the Good Shepherd, who had thrust a crochet needle into her hand, three times—each time it had become fixed in the same locality.

Dr. Prewitt said he remembered the case, and had extracted the needle. It was barbed at both ends, and there was no alternative but to seize and jerk it out.

Dr. Spencer.—I recall an interesting case of a foreign body in the external auditory canal. A young girl, an inmate of the House of the Good Shepherd, had lost a pin in the meatus, which she had introduced to relieve a troublesome itching. By some means the point became caught in the skin of the wall, and the head of the pin impinging on the drum-head, gave rise to the most distressing symptoms. I was obliged to make an incision, to free the point of the pin, before I could with safety remove it.

Dr. Ford.—I may as well allude here, to the care required in the removal of wire-sutures generally. I doubt if there is any one who has used them much, who has not had some trouble with them in this respect. Sutures have remained buried in the cervix uteri or vaginal wall, for many months. Before division, when extracting the sutures, they must be very securely seized by reliable forceps; if they ever get away from us, the most delicate forceps will not seize them again; nor the most expert probing detect them in the tissues. On two occasions, I have lost sutures in this way, notwithstand-

ing immediate and most careful search, with the finest eye forceps, and probes,—indeed even with incisions transverse to the supposed track of the suture. A wire suture, lost in this way, seldom, however, leads to unfortunate results. Although the ends be jagged, they seem to produce very little irritation. Still, however, the rule applies, that a foreign body of that kind, is apt to excite disturbance in the course of time.

Dr. Kingsley.—The allusion to foreign bodies, brings to my mind a very similar case. I was called to see a patient, who informed me she thought she had falling of the womb. I made an examination by means of the speculum, and discovered what I took to be a foreign body. Surrounding the neck of the uterus was a ring of inflammation, which appeared to be produced by the foreign body. I removed this body, and, on examination, I found it was a rubber ring.

Dr. Todd.—A girl came to me declaring that she had swallowed a pin. From her statements the pin seemed to have lodged between the epiglottis and the base of the tongue. The throat was very irritable, and not easy to examine. Introducing my finger, I thought it touched a pin lying lengthwise but could not find any end to it. I examined on the other side and found in the corresponding glosso-epiglottic fossa, what felt like a pin also: it became evident that it must be the sharp edge of the hyoid bone. The deception was perfect. After being prepossessed with the idea that there was a pin there, having not long before removed a pin from that locality, and feeling this peculiar resistant body just about the thickness of a stout pin, I concluded that that was it.

Dr. Prewitt.—I had a similar experience some years ago. A patient came to me who had a pin in the pharynx. There was a pin there, because I saw it. In trying to reach it I thought I felt a pin, which had got into the tissues, and was pretty firmly fixed there. With my fingers guiding, I passed a pair of forceps down. I found I could not move it readily; and on further examination, I was not surprised, for I found I had seized the hyoid bone, and I must confess that the feeling was very deceptive.

Dr. Ford.—You did not pull it out?

Dr. Prewitt.—No, but I got the pin out.

Dr. Ford.—Some years ago I saw a very curious case, of a gentleman from Illinois. He told me that while he was thresh-

ing barley, an "awn" had got into his mouth, and lodged just between the base of the tongue and the epiglottis. He could not get rid of it. It produced some ulceration, and in the course of four to six months, presented itself just under the skin of the throat, above the hyoid bone, in the opening of a small sinuous passage, which was still discharging. A fine probe, passed in towards the base of the epiglottis, for about an inch; I felt what I thought might be the remnants of this awn, or, possibly a roughened cartilaginous or osseous surface. He said that a portion of the awn had escaped through this orifice.

Dr. Leete.—I have heard harvesters complain of the difficulty of getting the beard of barley out of the skin, when it is broken off.

Dr. Prewitt.—I recollect, in the dissecting room, once, to have met with a piece of glass, that had lodged just at the outer side of the larynx. There is a fossa there, a sort of pocket formed between the aryteno-epiglottidian fold and the hyoid bone, and a piece of glass an inch in length, and about half an inch in width, had lodged there, and presumably, had been there a long time. It was comparatively smooth, and seemed to have given rise to no irritation. There was no ulceration about it, but I suppose the man had carried it there an indefinite length of time, perhaps not aware that it was there. I took it out, and upon examination the parts showed no evidences of ulceration.

SELECTIONS.

SIGMUND ON THE TREATMENT OF SYPHILIS.

Prof. Sigmund, in the second and enlarged edition of his lectures, says, that gonorrhea and soft chancre are quite distinct from true syphilis; they show signs of their presence in two or three days after contagion, while the incubation of syphilis lasts from eight to fourteen days, and sometimes longer. In their course, too, gonorrhea and chancre differ from syphilis, for while the two former run their course in four to six weeks in ordinary cases, syphilis always lasts for several months and often for years. With regard to syphilitic reinfection, Sigmund remarks that he has himself seen extremely few cases where second infection appeared probable, and that a more careful investigation has led him to doubt the reality of its occurrence. For the correct and complete diagnosis of syphilis, an exact knowledge of the whole organism of the patient is necessary; his previous history must also be taken into account. Only objective symptoms are reliable, or at least only such subjective symptoms should be accepted as agree with the objective. Syphilis is curable in most cases, but not in all. The poison is not exhausted on an average in less than two years. The period between contagion and the appearance of local signs, is about eight to fourteen days, and about the same time painless enlargement of the nearest lymphatic gland occurs. Within the next fourteen to twenty-eight days the remaining glands of the group enlarge. During the next six or eight weeks, most of the more distant glands become affected. About this time, also, red lenticular spots appear on the skin, and erythema about the fauces, accompanied by lassitude, neuralgic pains, and slight fever, and exceptionally there is disturbance of the circulatory and nervous systems, with general malnutrition. Sigmund recommends extirpation of the initial lesion by the knife or cautery, except during pregnancy. The wounds thus

left, heal as quickly as in healthy people. Whenever there exists the slightest breach of surface after suspicious intercourse, some caustic or other application, such as carbolic acid, salicylic acid, thymol, or iodoform should be used at once. Sigmund considers it has been shown by cases already published that, by the early application of such disinfectants, the syphilitic poison may be weakened, or even altogether destroyed. When a sore is indurated, it should be cut out, and the actual cautery applied to the wound. Before general treatment is begun, it is of great importance to get the secretions into good order, to prepare for mercury or iodine, as the case may be. It is generally agreed that treatment should be prolonged for two years, or even longer. Cleanliness and attention to hygiene are of the utmost importance in all stages of syphilis. There is no known means of preventing general constitutional symptoms, except the early extirpation of the initial lesion. The length of time which elapses between contagion and the first appearance of the rash on the skin, and perhaps in the throat, varies from six to eight weeks. According to Sigmund's experience, the early forms of syphilis (of the first six or eight weeks) do best under a purely local treatment. General specific treatment at this time does no good, and sometimes does harm. Of cases thus locally treated, forty per cent. show only slight secondary symptoms, often so slight that they escape the patient's notice altogether; ten per cent. show insignificant and quickly disappearing signs on the skin and mucous membrane, which are soon got rid of under local applications alone. By such expectant treatment, the number of grave cases of secondary syphilis is not increased; experience, indeed, shows the contrary to be the case. By delaying general specific treatment until a later period, better and more certain indications are afforded the physician, both as to the most suitable remedy, and also as to the best method of employing it. Even in the secondary stage, general antisiphilitic treatment should only be resorted to when several systems and organs of the body appear affected; or when one particular part or organ is severely attacked; or, lastly, when the general health and nutrition are clearly suffering from the influence of syphilis alone. The choice of the particular drug to be selected for general treatment depends on the form of manifestation present, and on the constitution of the patient. For the milder

symptoms, such as erythema, and papules, with general glandular enlargement, the preparations of iodine, combined with small doses of green iodide of mercury, are sufficient; or inunction of one to two grammes (15 to 30 grains) of gray ointment may be used daily. When mercury is contra-indicated, the iodides alone should be given. More severe forms, such as a high degree of glandular swelling, extensive papular, pustular, or scaly eruptions, should always be treated by mercury. Clinical experience does not support the teaching of those who only recommend mercury for the secondary, and iodine for the so-called tertiary stage. In the gravest forms of tertiary syphilis, *e. g.*, gummata of the skin, bones, and nervous system, mercury, especially by inunction, but also subcutaneously injected or administered internally, gives excellent results, while the iodides often fail when given without mercury. In the present state of our knowledge, the clinical rule should be to treat every *severe* case of syphilis with mercury at first; during the course of the disease, some preparation of iodine may be added to or given alternately with, mercury; or sometimes the treatment may conclude with a course of iodides. The details of general and local treatment of the various manifestations of syphilis are fully entered into in these lectures, to which the author has added an appendix, containing a large number of formulæ.—*Lond. Med. Rec., April, '80.*



PHANTOM TUMOR SIMULATING PREGNANCY IN AN ASS.

The Rev. Dr. Haughton made a communication on a case of phantom tumor, simulating pregnancy in one of the lower animals, and he hoped that a careful study of the phenomena in this case might help towards the more philosophical study of what occurred in the human female, as the mental disturbance, so large a factor in our notion of the phenomenon, as it occurs amongst women, would be almost, or altogether eliminated. Having purchased a fine specimen of a rare variety of zebra, he was anxious to provide a suitable partner for him; he therefore ob-

tained a healthy three-year old virgin ass. It was necessary to have a virgin, as it was known that the first intercourse gave a stamp to the subsequent progeny. Frequent and apparently satisfactory intercourse took place between the two. The ass came into season at intervals of five weeks, and remained so from ten to fourteen days, and its period of utero-gestation was eleven months. It was, therefore, easy to discern when the animal was in foal. After six weeks the ass began to enlarge visibly, and a man much accustomed to the breeding of horses, declared that he could "feel the foal inside her." The eleven months expired, and the ass came into season again without having given birth to a foal. After a lapse of four months, she was again given the zebra, and again she swelled, continued so for eleven months, and again gave birth to nothing. In this case, he considered that the mental element might be disregarded, for the ass could have no object in deceiving the zebra. It was at first thought possible that she had aborted in the night, and eaten the fetus; but the most careful search showed not a trace of such an occurrence. On each disappearance of the swelling, her abdomen returned to its normal size in one day.

NOTES AND ITEMS.

THE ST. LOUIS FAIR ASSOCIATION, in view of the importance of its Zoological collections, has just determined to create the office of Medical Director, the gentleman holding that office, to take charge of the sanitary condition of the collection, and to make an annual report, which shall include a statement of all casualties, results of post-mortem examinations, etc. One of the *COURIER* editorial staff, Charles A. Todd, was elected to fill the position. Dr. Todd, for several years has held a similar position at the Gardens, but this special office has been but just created, and will afford the holder special and obvious privileges.

ALUMNI PRIZE OF FIVE HUNDRED DOLLARS.—The Cartwright Prize of the Alumni Association of the College of Physicians and Surgeons, New York, which amounts to \$500, will be awarded, subject to the following conditions, to the best essay on some subject in medicine or surgery: First, the prize is open to the competition only of Alumni of the College. Second, the subject is left to the option of the contributor. Third, the essay must present sufficient original, experimental or clinical observation, to make it a useful contribution to medical knowledge. Fourth, the essay, designated by a motto, must be sent to a member of the Committee on prize essays, accompanied by a sealed envelope, inscribed with the motto, and containing the name and address of the author, on or before February 1, 1881. Committee: A. H. Buck, M. D., 52 East 31st Street; J. E. Janvrin, M. D., 120 Madison Avenue; W. T. Bull, M. D., 33 West 33rd Street.

The Alumni Prize, also amounting to \$500, will be awarded in 1882, subject to the same conditions.

THE TWENTY-THIRD ANNUAL SESSION OF THE STATE MEDICAL ASSOCIATION OF MISSOURI, will be held at Carthage, Jasper County, Tuesday, Wednesday and Thursday, May 18th, 19th and 20th.

Delegates from the East will arrive at Carthage at 12:30 p. m.; those from the West at 3:30 p. m., and will convene in the Opera House, at 4 p. m., of the 18th; holding, in all, five regular sessions, viz.: first, afternoon of the 18th; second, evening of the 18th; third, forenoon of the 19th; fourth, afternoon of the 19th; fifth, forenoon of the 20th. A banquet will be tendered the members, on the evening of the 19th, at Regan's Hall.

The citizens of Carthage will entertain, at their houses, the members in attendance, who will be met at the railway station by the Committee of Reception, and assigned to their respective places of entertainment. Ample hotel accommodations can be had by those who prefer.

Arrangements have been perfected by which railroad rates will be commuted to *full fare going, and one-fourth fare returning*, on the roads leading to Carthage from St. Louis, Kansas City and Sedalia.

Indications already point to an interesting and profitable meeting, and it is to be hoped that the members of the profes-

sion, very generally, will endeavor to be present, and that many will attend, prepared to read instructive papers.

All reputable members of the profession, in Missouri, are entitled to membership in the Association, and yet it would be well, as far as practicable, for physicians to attend as accredited delegates from local medical societies.

In behalf of the profession and citizens of Carthage, we can promise a most cordial welcome to the members of the Association in attendance. It will be at a season of the year, too, when nature will be in her happiest mood, to show up the beautiful scenery and wonderful resources of South-west Missouri.—These annual gatherings of the profession do much toward making its members acquainted, and towards ennobling the profession as such.

THE ARCHIVES OF LARYNGOLOGY made its first appearance on March 31st. This is a very handsome quarterly journal, edited by Elsberg, of New York; Cohen, of Philadelphia; Knight, of Boston, and Lefferts, of New York; with the co-operation of Boekel, Strasburg; Fonlis, Glasgow; Gerhardt, Wurzburg; Heinze, Leipzig; Krishober, Paris; Mackenzie, London; Oertel, Munich; Smiley, Dublin; and Voltalini, Breslau. The scope of the Archives embraces the Physiology of the Throat, and the Pathology and Therapeutics of Throat Diseases.

We congratulate the editors on the contents of the first number, which contains an elaborate paper by Elsberg, on the nature of Laryngeal Papillomata, a case of Extirpation of the Larynx, by Lange, and a number of interesting laryngeal cases, illustrated by excellent wood-cuts. The excellent quarterly report on Laryngological Literature, by Lefferts, is unusually rich and exhaustive. We wish our new exchange continued success and prosperity.

SULPHATE OF ZINC FOR CANCEROUS ULCERS AND GROWTHS.—Stephen Smith recommends in the treatment of cancerous growths or ulcers, so situated that removal by the knife is inexpedient, the application of anhydrous sulphate of zinc, as recommended by Prof. Simpson, of Edinburgh. It may be applied upon an open surface either as a simple powder, or made into a paste with glycerine—one ounce of dried pow-

der to a drachm of glycerine—or an ointment formed with an ounce of the powder to two drachms of axunge. The pain continues but a short time, generally, and patients rarely hesitate about a reapplication. After three or four hours, any liquid residue should be removed by the swab of cotton, and a hot poultice applied. It will require five or six days to separate and detach the slough, which is, for the most part, white and not offensive. If the surface is unbroken, he mixes the dried sulphate of zinc to a paste with strong sulphuric acid, thus producing a caustic which possesses the greatest energy, and at the same time retains all the good qualities of the other forms of zinc sulphate caustics.

In order to prevent pain, he first applies strong carbolic acid to the tumors as an anæsthetic. The surface becomes white immediately, serum is effused, raising a distinct wheal, and local anæsthesia is complete. He then applies the zinc paste with a glass rod, or with a pointed stick, drawing lines across the diseased mass in both directions, and rubbing the caustic into the furrows until the whole thickness of the skin is charred. A poultice is then applied, and after a few days, or about a week, the slough separates. Repeated applications may be made with the paste or powder, until all the morbid tissue is removed.—[*Med. Rec.*, Feb. 14, 1880.]

HIGH TEMPERATURE IN ACUTE PNEUMONIA—105°–110° F.—RECOVERY.—Dr. Marshall, of Centralia, Ill., reports a case of acute pneumonia in a young lady, æt. 17, in which, at noon of the fifth day, the temperature was 105° F., falling to 103° at evening. At nine the next morning, the temperature was at 105°; at noon, 110°; 4 P. M., 105°; 9 P. M., 103½°. At 1 P. M. of the seventh day, the temperature was 106°, but after that day, ranged from 96° to 100°. The patient recovered in spite of this extraordinary elevation of temperature.—[*Med. Rec.*, Feb. 14, 1880.]

THE OPHTHALMOSCOPE IN CEREBRAL DISEASE.—At a meeting of the Medical Society of the County of New York, Dr. Agnew expressed a lack of confidence in the value of the ophthalmoscope in recognizing the presence or absence of cerebral congestion. He does not believe, that as a rule, we can tell by looking into the eye with the ophthalmoscope, whether the patient has congestion of the brain or not. This view was approved by Drs. Bull, Pomeroy and others.—[*Med. Rec.*, March 15, 1880.]

INDEX MEDICUS.—The field which has been occupied by this journal is one which has never been entered upon by any other medical journal. It is simply and solely a Monthly Classified Record of the Current Medical Literature of the World, not only of our own but of foreign lands. Under the able supervision of Dr. John S. Billings, Surgeon U. S. A., and Dr. Robert Fletcher, M. R. C. S., England, the work has been faithfully and efficiently done, and the mechanical execution, of the journal, by F. Leyboldt, 13 and 15 Park Row, New York, is admirable.

To any studious physician, either of the general literature or of that concerning special departments, the magazine is invaluable, as, by consulting its columns, he can see at once just where to find articles treating of any subject which may be of interest to him. And more especially to one who is studying the literature of a special department, for the purpose of preparing a paper, much time and trouble will be saved by reference to a file of the *Index Medicus*.

We call attention to the journal at this time, for we feel that it ought to receive a much fuller and more substantial support than it has done as yet. The preparation and publication of such a journal involves a heavy expense, and the price is necessarily placed at a higher figure than most physicians would feel warranted in paying for such a work; but it ought to be upon the tables of every library and reading-room which makes the least pretense to keeping a supply of medical literature; and every medical society in the country should take it, and so make it accessible to all their patrons and members.

We trust that the publisher will receive such proof of appreciation and support from the profession, as will secure to us the continuance of this most valuable periodical.

WALSH'S RETROSPECT OF AMERICAN MEDICINE AND SURGERY.—In one hundred and fifty pages, per quarter, of closely printed matter, Drs. Walsh and McArdle are collecting from the various medical journals of the country, the most valuable papers, and reprinting them under the different headings of Medicine, Surgery, Midwifery, etc, in their *Retrospect of American Medicine and Surgery*. We see no reason why they may not achieve as great a success as have the Braithwaites with their *Retrospect*.

ST. VINCENT ASYLUM.—Dr. A. B. Shaw has recently been associated with Dr. J. K. Bauduy, upon the medical staff of the St. Vincent Institution for the Insane.

OBITUARIES.

DR. JOHN McDOWELL IS DEAD.

Dr. John James McDowell was born near Lexington, Ky., February 16, 1834, and died at Hot Springs, Arkansas, March 27, 1880.

From his parents he inherited more than ordinary abilities. His mother, Amanda Virginia Drake (sister of Dr. Daniel Drake) was noted for her strong common sense, for a keen appreciation of, and strict regard for the rights of others, for unbending firmness in the right, and all the virtues that arm a Christian wife and mother. His father, Dr. Joseph Nash McDowell possessed rare genius, a wonderful capacity for acquiring and imparting knowledge, and attained an enviable reputation as a surgeon, a public speaker and lecturer.

From childhood, John was noted as a bright boy; was fond of study, and like his mother, devoted to duty.

It was a habit of his boyhood to visit the dissecting rooms, and to be present at his father's lectures on Anatomy and Surgery. He thus acquired a good knowledge of Anatomy, before he began regularly to study medicine. Dr. John McDowell graduated at the Missouri Medical College, in the Spring of 1855, and was made Demonstrator of Anatomy the same year. With marked abilities he discharged the duties of this position, until 1861, when the lectures in this institution were suspended for several years. In 1864 he demonstrated Anatomy in the St. Louis Medical College; and, in 1867, he was elected Demonstrator of Anatomy in the institution, and continued to discharge the duties of that position, until 1873, when he was chosen Professor of Anatomy, which position he filled with marked ability to the time of his death.

During Dr. McDowell's connection with the St. Louis Medical College, he contributed a full share to the fund for the purchase of the college building, museum, chemical apparatus and other appliances for medical teaching.

Dr. McDowell possessed many admirable qualities. Honesty was so fully a part of himself, that it never occurred to him to pursue any other than an upright course. His appreciation of the rights of others, and a conscious uprightness in himself, stamped him as an eminently just man.

His devotion to duty was so determined, that he never neglected the smallest matter. Prompt and untiring in his attendance on his patients, prompt in filling engagements with his medical brethren, prompt at his lecture hour—giving the full hour and no more. Dr. McDowell never neglected a pecuniary obligation.

He was always self-possessed; he guarded well his tongue, but never hesitated in a vigorous expression of a carefully considered conviction of men or subjects.

Dr. McDowell never sought patronage, but served well those who entrusted their cases to his care. He never sought position, but discharged every accepted duty faithfully.

His friends alone knew his ability. He was a plain, strong man, a thorough student, who mastered any subject he undertook. As a teacher, his mind was occupied with his subject. He made no effort at display. A fine memory enabled him to hold the details of Anatomy, while a conciseness of language, characterized his lectures. The minutest details were carefully given in his lectures, while the important points stood out prominent, and then were easily grasped by the student.

Dr. McDowell was generous; his hand was ever ready to contribute to the wants of the needy. Economical in his habits—unmarried—doing a good business for twenty-five years—he died without wealth. His memory will ever be cherished by those whose homes he brightened by his presence, and whose hearthstones were warmed by his liberality.

For several years it had been known that Dr. McDowell had tubercular deposits in his lungs. He had a cavity, in the winter of 1878 and '79. In December, 1879, a profuse hemorrhage occurred. Hoping that a warmer climate would benefit his health, he went to Florida, but finding it damp, and bare of the comforts of home, he found his way to the house of his brother, Dr. Drake McDowell, of Hot Springs, Arkansas. Here he found a home, in which he received not only the kindly offices of the profession of Hot Springs, and the anxious care of his brother, but the sisterly attentions of his brother's wife. During the last weeks of his illness, he was hopeful,

patient, and though he sometimes suffered greatly, he was uncomplaining. He occupied his time in thinking, and talking with his friends, of the past, and greatly enjoyed its pleasant memories.

During several days, when not aroused, his attention was occupied with visions. At first they were but the distortion of natural objects about him. A figure on the ceiling, perhaps, would take an odd shape, gain life, and move from point to point, about the room. A familiar face would meet his view, a pleasant greeting would follow. If the friend appearing in the vision, were a stranger to the friends actually present, the doctor would introduce the strangers; and, perhaps, in a pleasant way, mention some peculiarity of each. When aroused from this dreamy state, he would at once realize the fact, that the odd things and the old friends he had seen, were creatures of the disturbed nervous centres; name the angular gyrus, as being the part of the brain which gave birth to his visions; and talk of the eye following these images, and the manner of this inverted psychological action.

During this period of his illness, he pursued his usual course of life, talking to his patients, driving his horse, making dissections for his lectures, etc., etc.

Thus died one whose loss will be felt by a large circle of friends, and who will be kindly remembered by the many pupils whom he taught Anatomy. H.

[We are informed that a movement has been inaugurated, to provide a memorial portrait of Dr. McDowell in the college. A small sum, from each of his former pupils, would suffice to secure this object, without being a burdensome tax upon any one. We hope that a prompt response will be made, and the money raised without delay. Sums, from one dollar upwards, may be sent to Dr. I. N. Love, 3401 Chestnut Street, Dr. G. F. Gill, 610 N. Fourth Street, or to any member of the Executive Committee of the Alumni Association, of the St. Louis Medical College.—ED.]

COPEMAN.—Dr. Edward Copeman, of Norfolk, England, recently died, at the age of seventy-one years. He was a man of profound knowledge and varied attainments, and contributed much of value to medical literature, especially in the departments of obstetrics and gynecology. A few years ago he directed the attention of the profession to the value of dilatation of the *os uteri* in the vomiting of pregnancy.

DR. ANZOUX, the famous maker of anatomical models, is dead.

SOCIETY MEETINGS.

THE MEDICAL ASSOCIATION OF THE STATE OF MISSOURI will meet at Carthage, on Wednesday, May 19th, 1880.

THE MEDICAL ASSOCIATION OF THE STATE OF ILLINOIS will meet at Belleville, on May 18th, 1880.

THE AMERICAN MEDICAL ASSOCIATION will hold the thirty-first annual meeting in New York, Tuesday, June 1st, 1880.

THE ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY will meet at the house of Dr. W. Hutson Ford, 3501 Lindell Avenue, Thursday, May 27th, 1880. Paper by Dr. Prewitt.

MORTALITY TABLE.

FOR THE FIVE WEEKS ENDING APRIL 17th, 1880.

CITIES.	ESTIMATED POPULATION.	DEATHS.	DEATH RATE PER 1,000.
New York.....	1,097,563	2,261	26.1
Philadelphia.....	901,380	1,720	19.8
Brooklyn.....	564,448	1,116	20.5
Chicago.....	537,624	1,002	19.3
St. Louis.....	<u>500,000</u>	<u>645</u>	<u>13.4</u>
Baltimore.....	400,000	709	18.4
Boston.....	375,000	755	20.9
San Francisco.....	300,000	380	16.4
Cincinnati.....	280,000	516	19.
New Orleans.....	210,000	520	25.7

ST. LOUIS COURIER OF MEDICINE

— AND —

COLLATERAL SCIENCES.

VOL. III.

JUNE, 1880.

No. 6.

ORIGINAL ARTICLES.

MEASLES.

(RUBEOLA—MORBILLI.)

BY CHARLES O. CURTMAN, M. D., ST. LOUIS.

DURING the recent prevalence of measles in our city, there occurred so many cases of second seizure among those who were thought protected by an attack a few years ago, that many wondered how it happened that it was almost the rule, that measles should be contracted twice, while small-pox and scarlet fever usually attacked the same individual but once in life. This has again drawn attention to the fact, often called in question, that there exist two diseases, quite distinct, though similar in many of their features, designated indiscriminately by the name of measles.

The differentiation between the two is by no means of recent date, and may be found mentioned by some medical authors of the last century. Just as the distinctive phenomena were not very accurately described, it had become

the fashion to ignore all difference, and to claim that there exists but a single disease to which the name of measles or rubeola was assigned. More recently, again, the doctrine of unity of the disease has lost favor, and the terms "Hybrid Measles," "German Measles" and similar ones have become current, while a number of the severer cases of the rubeola group have been said to be milder forms of scarlet fever, or have received the name of *scarlet rash*, to distinguish them from true scarlet fever.

The writer was early taught to believe in the duality of the disease (the old German family physician having termed the one variety "masern," the other "rötheln") and has, therefore, endeavored during various epidemics, to collect evidence to establish either the truth or the fallacy of such opinion, as the result of which he makes the following statement of his observations:

"There are two distinct groups of symptoms characterizing the two diseases. In the one, which has so recently prevailed, and of which numerous cases are still occurring, they present themselves about as follows: The eruption (where not confluent) consists of *single papulæ*, each one surrounded by a *separate, small, red areola*. Not unfrequently, the papulæ are large, sometimes a few of them pass into vesicles or now and then even into pustules. The catarrhal symptoms, which play such an important part in the other variety, are present, but not very strongly developed; there is less coryza, less ophthalmia, less photophobia. On the other hand, we have, from the first, severe pharyngeal inflammation, often involving the tonsils and eustachian tubes; glandular disturbances are more frequent, bronchitis does not often assume a threatening character. Among the *sequelæ*, pneumonia of the right lung, abscesses in various localities and sometimes nephritic troubles occur. To this variety I have been in the habit of applying the name "rubeola," corresponding to the German term "rötheln" (derived from the word "roethel" meaning red chalk or reddle). There is no vernacular name for this disease, but if its distinct character is once universally

recognized, it will not be difficult to adapt a significant name. In the other variety, to which I apply the term *morbilli*, *true measles* (German *masern*), we find a different arrangement of the characteristic eruption. The *papulæ* are *very small, mostly multiple*, from four to six standing on a single areola, which is larger than that of rubeola. This appearance does not seem to be occasioned by confluence, but is repeated in many spots distinct from each other. Sometimes, but not invariably, a somewhat crescentic arrangement occurs. The *papulæ* are less prominent, vesicles are seldom found on the areolæ, though miliary vesicles without areola show themselves occasionally. The *catarrhal symptoms* are well pronounced, ophthalmia and coryza are prominent symptoms, photophobia often extreme; severe bronchitis but very little throat affection. When pneumonia supervenes, it is most frequently *left-sided broncho-pneumonia*. I have never met with kidney affections.

The period of incubation and of the successive stages of eruption, deflorescence and desquamation do not appear to differ in both diseases. Secondary fever is more frequent in rubeola.

Two cases occurred in my practice, in which, after an interval of a few weeks, morbilli succeeded rubeola, and these two are the only cases of morbilli recognized by me this year. Quite a number of patients had rubeola this year, who had been affected by measles in previous years. I confess an inability to discriminate a number of cases accurately, mostly on account of confluence of the areolæ or the existence of such violent dermatitis, that the character of the individual papillæ and areolæ was rendered too indistinct for recognition. Other cases were only seen at a period, when the characteristic eruption had either not fully developed or had disappeared. I am fully aware, how easily early prepossessions may bias the judgment and incline any one to consider accidental features as of more importance than they deserve, or else to overlook other appearances because they are not prominent in every case. Yet I feel confident that the distinctive characters of the

two diseases, which have so strongly impressed themselves upon my attention, have not failed to make a similar impression on my colleagues, some of whom have already communicated to me the full coincidence of their observations with mine. In whatever manner the question may be finally decided, the subject of duality of the disease "measles" seems important enough to merit careful consideration.



RÖTHELN, GERMAN MEASLES, ETC.¹

BY R. T. HENDERSON, M. D., SHAWNEETOWN, MO.

DURING the spring of 1867, I treated a younger brother for what I supposed at the time to be scarlatina. The symptoms were about as follows: Without any premonitory symptoms perceptible, he was taken with fever of considerable severity, attended with nausea, sore-throat, and rash, which appeared first on the neck and chest, and extending downward, reached the extremities by the second day. This at first looked like measles, but quickly formed irregular patches, which were raised, especially at the center, where the color was of a deeper red than toward the circumference; by the close of the fourth day the rash disappeared, followed by furfuraceous desquamation, beginning at the center of the patches, the fever subsiding simultaneously with the disappearance of the eruption. There was, following the decline of the disease, considerable albuminuria and dropsical effusion, which more fully convinced me that my diagnosis was correct. A few days intervening, a younger brother, and a few days later another still younger, fell ill of the same disease, but of so little severity as not to send them to bed, and, but for the anxiety

1 Read before the Southeast Missouri Medical Association.

of careful parents, not to have kept them within doors; both in two or three days regaining complete health. In less than a month, a dozen patients in almost as many families, varying between the ages of infancy and fifteen years, came under my care and observation, none, however, of as much severity as the first case.

The fact that my patients were scattered over a considerable territory, that but few of them had been exposed to the contagion of the disease, "the irregularity of its incubation, development, maturity, progress and decline," led me finally to doubt, after all, the correctness of my diagnosis. About this time I met my neighbor, Dr. O. W. Cline, who informed me that he was having a mild epidemic of anomalous scarlatina to deal with in his neighborhood; his experience being very much like my own, his mind too "was much exercised over the wide uncertainty of the phenomena of scarlet fever, having regard to its incubation, development, duration," etc.

The disease passed away, no mortality attending it, and the whole affair had somewhat faded from my memory, when I received the December number of the *Cincinnati Lancet and Observer*, 1874, which contains an excellent paper on "Rötheln, or German Measles," by Dr. James F. Hibbard, of Richmond, Indiana, read before the Union District Medical Society, October 29th, 1874.

After carefully reading this paper, I became convinced that the disease that Dr. Cline and myself had been calling scarlatina was rötheln; and "I am apt to believe that many anomalous cases of disease which have been called variously French measles, scarlet rash, and other irregular and indefinite names, have been veritable specimens of rötheln."

Our literature on this disease is somewhat meager and unsatisfactory; and it is only in the later editions of the *older* and in the more recent text-books by English and American authors, that the disease is mentioned at all.

Copland informs us, that the Ancients described epidemics of this disease, but confounded it with other exanthemata.

German authors have the honor of having first treated this distemper as a distinct pathological condition.

Tilbury Fox tells us that it is reported as having occurred in Malta, India, etc., and we may infer that latitude does not circumscribe it, but its territory is extended, prevailing in the north as well as at the tropics, and in the eastern as well as the western hemisphere.

It seems to prevail most extensively during the spring and autumn, though no season may be exempt from its invasion.

Dr. J. Lewis Smith reports in the *Sanitarian* for July, 1874, an epidemic which prevailed in New York city from December, 1873 to April, 1874, the largest number of cases occurring during February, March and April of that year, (1874). My own experience was during the spring season, as has been that of Drs. Mann, Cline and Vineyard. Dr. Hibbard in the paper already referred to, reports his first case as occurring on the 22d of September, there being no exanthematous disease in the neighborhood, but adds "about four months afterwards we had a wide-spread epidemic of mild scarlet fever." Meigs and Pepper in their comprehensive work on Diseases of Children, sixth edition, article on Roseola, say that it may occur at any season, but is most common in summer and autumn.

Rötheln attacks persons from infancy to twenty-seven years of age, and probably older. Of Dr. Smith's forty-eight cases, forty-one were under ten years of age. Dr. Mann informs me that he has never met with a case in an adult, while Drs. Vineyard and Cline each met with a number of adults laboring under the malady during the same epidemic. Infancy and childhood are certainly the ages most susceptible to its invasion.

The premonitory symptoms are usually mild, and in some cases absent.

Dr. Smith says, "sometimes children preparing to go to school, were observed to have the rash, although they had eaten their meals regularly, and complained of no ailment. In one or two instances, they were sent from school, because

the teachers observed the rash, although they felt well enough to continue their lessons. In one case only, were there grave premonitory symptoms, namely, in a boy of eight years, who had clonic spasms." This accords with the experience of Dr. Vineyard, who writes me thus: "It passed through many families without creating sufficient trouble, or alarm to cause them to call a physician. In a very few instances the disease would assume a most malignant form—extremely high fever, severe sore-throat, dry, hacking cough, dry, harsh skin, with moderate constipation, followed in some cases with severe diarrhea, and in some instances convulsions in the beginning of the attack." In most of the cases sufficiently grave to induce the employment of a physician, the ailment will be found to have begun with more or less chilliness, alternating with heat, headache, nausea or vomiting, and restlessness. At the same time there is some febrile reaction, marked by accelerated pulse, heat and dryness of the skin, thirst and loss of appetite, and either constipation or diarrhea. These symptoms continuing, the rash makes its appearance on the second or third day, if it has not already done so on the first, rarely being delayed beyond the fourth. It shows first on the neck, face and chest, extending rapidly to the rest of the body, its first appearance being maculated like the rash of measles, but of a brighter color, at first red, but soon changing to a deep rose color. The spots soon coalesce, but instead of becoming patchy, horse-shoe-like or crescentic, as in measles, they make a more diffused redness like the efflorescence of scarlet fever. In some instances, the rash on one part of the body resembles more that of measles, and on another that of scarlatina. The more severe the attack, the more nearly does the rash, as well as the other symptoms, resemble scarlet fever. It commonly produces slight itching, though in rare cases it is accompanied by stinging pain; it disappears on pressure, and causes a little roughness, as evidenced by carrying the fingers over the surface. It is most prominent on the first day of its appearance, after which it gradually

fades, and disappears by the second or third day, either with or without desquamation. As to the desquamation, wide differences are made by different observers. Fox says, "there may be slight desquamation." Bristowe informs us "that it is often followed by branny desquamation." Dr. Mann writes that he observed no desquamation, whilst Dr. Vineyard tells me that in his cases desquamation was seldom noticeable. In my first case, the desquamation amounted almost to an exfoliation, and in most of the cases, I had slight furfuraceous desquamation, yet there were exceptions. Hibbard says, "desquamation follows the decline of the exanthem, and is generally of the branny character, and usually proportioned to the extent and sharpness of the rash, differing in this from scarlet fever, where slight efflorescence is sometimes followed by a large desquamation."

The majority of cases are attended with sore throat, more or less severe—inflammatory but not ulcerative, the submaxillary and parotid glands sometimes sympathizing. It begins with the fever and continues until desquamation is completed. There is, in some cases, marked congestion of the conjunctiva, as well as defluxion from the nose, with sneezing and a little cough—showing a catarrhal condition of the common mucous membrane lining the air passages. These symptoms in the milder cases, are usually absent, and in the gravest cases often not prominent.

Rötheln does not protect against scarlet fever or measles, and *vice versa*, neither of these protect against rötheln.

A majority of my own cases had had measles; and this is true as regards my neighboring physicians. That it does not protect against measles, I might cite the experience of a number of observers, but the following extract from the report of Dr. Mann will suffice. He says: "That it does not protect against measles, I know, because the same little girl on whom Dr. Cline diagnosed rötheln eighteen months ago, is now just recovering from a very severe attack of measles." That the same holds true, in relation to scarlatina, we have the authority of Murchison, Liveing and others.

The rash in scarlatina is of a much brighter tint, more persistent, and more uniformly spread over the surface than in r  theln. In scarlatina the eruption is composed of very large patches, or it is absolutely uniform, and evenly distributed over large surfaces. In r  theln on the contrary, the rash is composed of irregularly circular, crescentic or waving patches, of a deep rose, instead of a bright red or scarlet color as in scarlatina.

These facts in relation to the eruption, taken together with the absence of prodroma and mildness of the premonitory fever—the pulse in r  theln not having the great frequency almost invariably present, even in very mild cases of scarlet fever—the comparative mildness of the symptoms throughout, the short duration of the attack, and its feebleness of infection, give us points of difference sufficiently marked to render an easy diagnosis in ordinary cases; but it must be admitted that in very severe attacks of this disease, the similarity of all the symptoms, as well as the sequences that are likely to follow, to those of typical cases of scarlatina, *may be* such as to render a differential diagnosis practicable only by means of the prevailing epidemic.

Observance of the greater prominence of catarrhal symptoms, greater gravity of all the symptoms, the more uniform regularity of the initial phenomena and their longer duration in measles, will enable us to distinguish between this disease and r  theln.

“A typical case of any of the acute exanthemata may be diagnosed with speed and certainty,” but my experience with this class of diseases teaches me that in the beginning of an epidemic of any of them “mistakes may be made by diagnosticians of more than average acumen.”

As stated in the earlier part of this paper, many mistakes have been made in relation to this particular malady from the fact that it has not been recognized among us as a distinct disease until recently. That it has prevailed in this country in times past, I have not a doubt.

Many persons tell me that they have had measles twice.(?) My friend, Dr. E. R. Harris, reminds me of an epidemic of

"Dutch measles" which occurred during the year 185—, in the Pleasant Hill neighborhood, this county, the disease originating in the high school, attended at that time by a considerable number of students. It prevailed quite extensively, resulting in one death. Dr. Harris himself had an attack, having previously had measles.

Fox holds the disease not contagious, or at least slightly so, whilst Bristowe and some others regard it as both contagious and infectious. Dr. Smith in his report, says, "in twelve out of fifteen families the disease was multiple; the disease usually began with one of the older children who was attending school." As far as I am able to determine from my own observations and the various reports at hand, I regard it as contagious, though in a less degree than either measles or scarlatina.

At the outset, a warm bath, rest in bed, an abundance of pure, fresh air, a mild laxative, or some antacid preparation to correct gastric or intestinal derangement, mild diaphoretics, and demulcent drinks, together with bromide of potassium or other nervous sedatives, to allay restlessness, and when necessary, tonics and stimulants, is about all the treatment requisite. The remarks of Hibbard are quite pertinent here:

"The therapeutics of r  theln is not so important. The disease is usually a mild one; and no physician, except he be an infatuated, heroic practitioner, is likely to go astray in its treatment. It is not, therefore, on this account that I have presented the subject for consideration; but I have brought it forward because it is a real existence among us, which it has not been our wont to recognize, and it is our reasonable duty to know of, and be able to diagnose every distinct form of disease that exists in the communities in which we practice medicine."

SPONTANEOUS CLOSURE OF AN ARTIFICIAL GASTRIC FISTULA IN A DOG.

BY CHARLES A. TODD, M. D., ST. LOUIS.

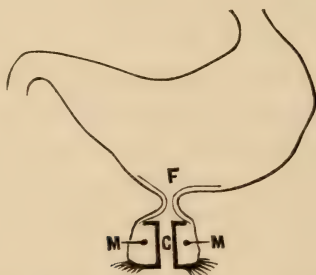
THE preparation described below, was presented before the St. Louis Medico-Chirurgical Society, Nov. 24, 1879. It was regarded as of especial interest, in view of the fact that gastrotomy, as an operation for the establishment of a permanent fistula in cases of aggravated stricture of the œsophagus, is likely to become fixed in the list of legitimate methods of treatment.

For two years the animal had served as an illustration before the medical class, the fistula remaining pervious and the gastric juice being readily obtained in the usual manner; but on the third occasion, a little more than two years after the operation, it was found that the bougie could not be introduced into the stomach, nor could any other foreign body. Persistent attempts only disturbed the animal and brought away a little bloody and viscid fluid. As the dog had not been examined for a number of months, it could not be determined how long the fistula had been closed. During the last summer, he had been observed to scratch at the canula frequently, and abundant granulations protruded about it, requiring frequent removal; at one time the external wound gaped to such an extent as to require quill sutures for a number of days.

The dog having become useless for demonstration and experiment, and the callus about the canula having injuriously thickened, pressing against the external flange of the canula, he was killed.

Post Mortem.—Stomach of normal size and general appearance. At the internal site of the fistula, a slight indentation only visible. The canula with exception of the

external flange, buried in firm cicatricial tissue, which next the metal exhibits a somewhat vascular surface and secretes a viscid matter. The internal flange lies in a pocket, the transformed original stomach wall. This pocket communicates with the present cavity of the stomach, through the fistula F, which has an internal diameter of about $\frac{1}{25}$ inch. The walls of this minute fistula form a firm, fibrous cord one-inch in length. The canula C, is of coin-silver, and has two wide flanges, its internal diameter one-half inch. M indicates the cicatricial envelope, which is firmly attached to the tip of the ensiform cartilage, the incision having been made in the median line, a little below that cartilage.



It seems evident that between the peristaltic movement of the stomach, the movements of the abdominal muscles and walls of the chest, together with the irritation kept up by the tugging upon the external flange by the dog in scratching, that the stomach had gradually withdrawn from its unnatural fastening, elongating its walls at the internal flange, until a funnel was formed, the cavity of which, under a progressive fibrous degeneration of the walls, finally shrunk to a minute fistulous track. Whether the fistula in time might have become totally occluded, of course can be a matter of conjecture only.

When the stomach was examined, immediately after death, a very small steel probe failed to discover any opening at the bottom of the depression above described, as marking the site of the internal wound; hence it was reported to the Medico-Chirurgical Society that the fistula

had completely closed; but as post-mortem relaxation set in, a fistula, as already described, was found, and the first report duly corrected.

ORIGINAL LECTURES.

THE EFFECTS OF MALARIAL POISONING UPON THE EYE.

BY CHARLES STEDMAN BULL, A. M., M. D., *Surgeon and Pathologist to the New York Eye Infirmary.*

There is nothing more certain in internal pathology than that malarial diseases, especially of the chronic or pernicious varieties, are the cause of great disturbance and even destructive changes in many parts of the whole organism. When we recall the various cerebral symptoms, due probably to disturbance in the circulation of the central nervous system; hemorrhages from the nose, gums and bowels; albuminuria and hematuria, and the hypertrophic degeneration of liver and spleen; it ought to be no surprise that the eye may and does also suffer from the same poisonous element resident in the system, which has produced all these other signs of disease.

That paludal infection is very often the cause of obstinate neuralgic attacks in various regions of the body, especially in the branches of the tri-facial nerve, is also well known. Supra-orbital neuralgia is extremely common as a symptom of obstinate malarial disease.

Clinically, it may not always be possible to distinguish this form of neuralgia from others, for as a rule it does not preserve a strict intermittent type. These cases may be of the quotidian type for a period and then disappear for days. Niemeyer thinks the neuralgic attack is usually accompanied by a slight febrile movement. Many writers have spoken of various forms of

conjunctival irritation and even of inflammation as due to malarial poisoning, especially in fevers of the intermittent type, and Pagenstecher has reported cases of conjunctivitis sometimes accompanied by paresis of accommodation, due to malaria, and the only symptoms present. He calls this form of fever the "*febris intermittens larvata*."

In the latitude of New York, cases of severe paludal infection are rare, and though instances of conjunctivitis and marginal or ciliary blepharitis are very common in patients suffering from malaria, the deeper and severer lesions of the eye are extremely uncommon. That such complications do occur in tropical countries, and with considerable frequency also, is proven by the numerous reports of cases scattered through general and special medical literature during the past fifteen or twenty years. The cases of functional disease of the eye due to this cause are not at all uncommon, and reports of transient obscuration of vision, of amblyopia as distinct from amaurosis, if we must still retain these two words in use, are part of the regular history of these cases occurring in the tropics.

Retinal hemorrhages, sometimes arterial and extensive, neuro-retinitis with or without the symptom known as "choked-disk," exudative retinitis, and even atrophy of the optic nerve, are among the serious lesions of the eye attributed to this cause. But it should not be forgotten that severe hepatic and renal diseases exist in these cases, which of themselves would be very likely to occasion these lesions in the eye, and hence there is need of careful and rigid examination of these reports before admitting the direct relation of cause and effect.

The cases in which the patient complains of transient loss of vision, or partial amblyopia, are due to a more or less complete paralysis of accommodation, which may be accompanied by a dilated pupil, though the mydriasis is not always present. If both the ciliary muscle and sphincter iridis are paralyzed the patient sees indistinctly at all distances; while if the ciliary muscle alone is affected, he is very apt to see fairly well at a distance, but very indistinctly near objects. When the loss of vision complained of, is extreme and lasting, it is something more than amblyopia, and resort must be had to the ophthalmoscope to aid us in determining the lesion. But even this may prove of no avail, for the fundus of the eyes in such a case may be absolutely normal and yet vision be entirely abolished, either from some

cerebral lesion or from a hemorrhage into the optic nerve or its sheath, or from a neuritis localized back of the eye. Eventually ophthalmoscopic signs appear in these cases, and they are usually those of atrophy of the optic nerve, occurring in both eyes, though perhaps to a different degree. After a careful examination of nearly one hundred and fifty cases, in which the disease was contracted in nearly all parts of this country and South America, the writer is forced to the conclusion that the cases in which severe permanent lesions of the eye complicate the original disease, are very rare. Not a few cases have been reported in which the optic nerve and retina were the seat of exudative inflammation, but in all of them the malarial saturation of the system was of long duration, and both liver and kidneys were diseased. Hence, in these cases, the chronic hepatitis or nephritis would step in as the immediate cause of the trouble in the optic nerve and retina, though the paludism was the remote cause of both. All such cases have been excluded and thus the chances of meeting with cases of degeneration or inflammation of the optic nerve and retina, due directly to miasmatic poisoning, have proven, in the writer's experience, to be very small.

Deval in his "*Traité de l'Amaurose*," published at Paris in 1851, mentions cases reported by Arrachart and Pinel, in which amaurosis appeared in the course of intermittent fever, and speaks particularly of one case of tertian fever which had lasted three years while the patient was in Oran, in which marked amblyopia existed. On the patient's return to France, the intermittent fever disappeared, but the amblyopia remained, was only very slowly recovered from, and vision was never completely restored.

In the *Wiener Medizinische Presse* for 1870, Dutzmann reports a case of severe tertian fever in a young man, in which there was loss of consciousness and violent clonic convulsions. When consciousness returned, vision was found reduced to faint perception of light. The ophthalmoscope gave a completely negative result as regards any changes in the fundus or media. After a large dose of quinine the vision began slowly to improve and was eventually entirely restored.

In the *Centralblatt für Augenheilkunde* for February, 1879, is a reference to two cases of Dr. Koslowsky, in one of which retinitis albuminurica with chronic nephritis was present, and

this case is therefore to be excluded. In the other case, after every paroxysm, the visual field was narrowed and the vision failed, often ending in complete blindness, which lasted several hours. On each occasion Koslowsky recognized very marked hyperemia and edema of the optic disks. By the next morning all these signs had disappeared. This ophthalmoscopic report is questionable.

In the *Centralblatt für Augenheilkunde* for March, 1879, are some observations by Peunoff upon the diseases of the eye in intermittent fever, the results of the examination of a large number of patients. He first examined seventy-two patients suffering from fever who did not complain of their eyes. In these he found the pupil dilated during the paroxysm, and the optic nerve and retina hyperemic, and this more marked in the heated stage than in the cold stage. In some cases the hyperemia was so great as to resemble neuro-retinitis. It usually disappeared however in five or six hours. Peunoff also found in anemic persons who had been long subject to intermittent fever, an anemic condition of the conjunctiva, and in some a deposit of pigment in the membrane. He also found pigment deposited around the sheath of the optic nerve, even in blonde persons, who were subjects of the disease. It seems to the writer that some of these observations should be received with caution. It is known to every ophthalmologist that it is extremely difficult, nay, well-nigh impossible, to say that an optic disk is hyperemic, unless the patient has been carefully observed for a number of times, or unless the hyperemia is so marked as to simulate an actual neuro-retinitis. The vascularity of the optic nerve and retina differs with different individuals, and even in the two eyes of the same person, and hence statements in regard to hyperemia of these parts are of doubtful value, except under the circumstances mentioned.

Again, it is no very uncommon thing to find deposits of pigment around the entrance of the optic nerve in blonde persons who are not the victims of malarial poisoning and never have been. The writer has seen these deposits not only round the papillæ, but also along the vessels of the retina, and regards them as physiological, peculiar to the individual, but certainly not pathological.

In another set of patients, all soldiers in the military hospitals at Tiflis, and all scorbutic, who had been subject for a

long time to intermittent fever, Peunoff always found very marked anemia of the retina and optic disk and fresh hemorrhages in the macula lutea and along the vessels, as well as in the conjunctiva. Now, in regard to the single point of extravasations of blood in the retina, it is well-known that they very commonly occur here in the course of scurvy, as they do in other parts of the body, and as Peunoff does not say that the malarial poisoning caused the scurvy, it does not seem clear that we are to look to that cause for the retinal hemorrhages. In regard to the conjunctival hemorrhages, they occur too frequently in other diseases, as well as without any cause, to lead us to connect them particularly with intermittent fever.

Peunoff then gives his observations on patients with intermittent fever, in which there was a demonstrable affection of the eye which could be regarded as the result of the fever. In many of these cases during the pyrexia there was marked conjunctival hyperemia which disappeared with the febrile stage. In some cases there was lachrymation, photophobia and blepharospasm. In some cases again he observed actual iritis develop, though this was not common. During the paroxysm the pupil was not dilated by atropia in some cases. In one case neuro-retinitis was developed during the continuance of the fever.

Peunoff himself, long subject to intermittent fever, suffered from complete amaurosis of the left eye, during a violent paroxysm of the fever, which lasted twenty-four hours, accompanied by aphasia, left hemiplegia and anæsthesia.

Reich, who reviews Peunoff's work, while suffering from fever, had a characteristic right lateral hemianopsia of both eyes, which disappeared the following morning. In two cases of coma from fever, Peunoff saw complete amaurosis of both eyes, with aphasia and paralysis of the extremities during a paroxysm; vision was completely restored in a few days.

Of course, there is nothing characteristic of malarial poisoning in any of these symptoms. They may occur alone, or in the course of other diseases. Peunoff thinks that most of the ocular symptoms in intermittent fever are dependent on cerebral hyperemia, which must be accepted with some allowance.

More recently, Fernandez has published an article in the *Cronica Oftalmologica*, entitled "Visual troubles caused by Miasmatic Fevers," and reported in *La France Médicale* for

September 27, 1879. He cites cases under the care of Morand, Ozanam, Valla-Berlinghiere and Duboué, of pernicious fevers with amaurotic symptoms, visual hallucinations, ocular neuralgia, etc. Guéneau de Mussy has reported a case of severe pernicious fever with periodic facial neuralgia and derangement of vision, in which the ophthalmoscope showed serous infiltration of the retina, hemorrhages and choroidal atrophy. Fernandez cites a case of Nolan with trifacial neuralgia, facial paralysis and slight optic neuritis. In still another case in which there were epileptiform attacks with diminution of vision, the ophthalmoscope showed a multitude of hemorrhages in the retina. But in all these cases there is no reported examination of the state of the heart or kidneys.

Even in the most aggravated cases of malarial infection of the ordinary type, distinguished by their obstinacy, a lesion of the deep tissues of the eye is rarely met with. It seems, however, to be the almost unanimous opinion of observers, that in the cases known as pernicious fevers, these complications are to be expected, and their severity to bear a close relation to the intensity of the general disorder. And these symptoms may occur early in the disease, even at the very outset, before there has been time for the development of any chronic renal or hepatic degeneration.

Among other observers, Macnamara has had abundant opportunity of observing cases of severe infection in the Orient, and he asserts that malarial infection is very often the cause of retinal hyperemia. This he considers is due either to a change in the composition of the blood, which renders it incapable of nourishing the tissue, or to an affection of the sympathetic. In the natives of India the fundus of the eye has, in the normal state, a greyish-green color around the optic papilla, but during a paroxysm of the fever this became a pale red from capillary congestion. He also has seen marked retinal edema in bad cases of malarial poisoning.

Schreiber says, that in every violent paroxysm of intermittent fever in a patient there is to be seen a slight hyperemia of the fundus. This I regard as an extremely improbable statement from the very nature of the subject.

“A diagnosis of retinal or choroidal hyperemia in a given case, whether before, during, or after a paroxysm, I do not believe to be reliable, unless the patient has been carefully and repeatedly ex-

amined at other times by an expert, professional ophthalmoscopist, and the condition of the two retinae compared with each other."

Neuritis and neuro-retinitis are much more easy to recognize, and hence reports of such cases are, perhaps, more to be relied upon. Cases of retinitis alternating with violent ciliary and supra-orbital neuralgia are not so very uncommon, and when the latter is intermittent in type, and both the lesions are cured by quinine, or disappear during its administration, the diagnosis of course is confirmed. It must be remembered, however, that most of these reports come to us from southern latitudes, as Algiers, India and South America, where types of disease are more pronounced.

I have myself repeatedly examined ophthalmoscopically the retinae of patients before, during and after a paroxysm of intermittent fever, and have never been able to notice any change in the size of the vessels, and certainly not any hyperemia of the fundus during the fever. The retinal circulation is so independent of the intra-cranial circulation, and the connection between them is so distant and indirect, that this is not to be wondered at. Numerous observations have been made by various observers, at different times, upon the effect upon the retinal circulation of the administration of certain drugs, both solid and vaporized, and also as regards the action of electricity. These examinations have been carefully made and the result has been almost invariably *nil*.

Cases of so-called hemorrhagic retinitis, with and without interstitial exudation, have from time to time been reported, among others by Galezowski, who also thinks that the optic nerve atrophy, occurring in this disease, is what is known as inflammatory atrophy, from a preceding neuritis. That atrophy of the optic nerve, as a direct result of malarial poisoning, does occur, is settled beyond a doubt. The destruction of nerve elements in the optic disk, is, however, not always in proportion to the changes seen with the ophthalmoscope. This form of optic nerve atrophy is not always connected with a marked anemic condition of the patient, as might be expected in cases that were saturated with the malarial poison. For a more detailed account of the manner in which the optic nerve is involved in these cases, the reader is referred to a paper by the writer in the *American Journal of Medical Science*, for April, 1877.

The occurrence of iritis and choroiditis, seems to me extremely doubtful, though several cases are reported by Peunoff and others, in some of which quite extensive opacities in the vitreous humor existed. In two cases in which there were not only movable but stationary opacities, and in which the vision was reduced to one-seventh of the normal standard, the treatment by large doses of quinine, proved very successful on the vision, which rose to five-sixths, nearly the normal degree, in the course of a month.

It seems, to the writer, that special care is necessary in our examination of patients who are suffering from malarial disease, and in whom there exist retinal hemorrhages or exudative retinitis, with particular reference to the state of the heart, blood-vessels, liver and kidneys. Disease of any of these organs, especially if of the chronic type, is extremely apt to cause retinal inflammation or hemorrhages, or both. We should not be too hasty in attributing these serious lesions of the eye to malarial disease, until other causes have been carefully excluded.

New York, May 1, 1880.

CASES FROM PRACTICE.

TWO CASES OF ŒSOPHAGOTOMY.

By J. T. HODGEN, M. D., ST. LOUIS.

CASE I.—On the 7th of July, 1877, W. G. Brodie, a healthy boy, aged 12, was playing at jackstones, and had one of the toys in his mouth when called to dinner; as he arose to run into the house, it slipped into his throat. It gave him great pain, and produced some difficulty in breathing. By the advice of friends he tried to drive it down by swallowing bread and water.

He next applied at a public clinic, and was told there was nothing in his "swallow." He could not swallow meat, but

could eat bread when well masticated. His food was, of course, chiefly liquid. Respiration became difficult; towards the latter part of July the difficulty increased, until, when I first saw him, on the 2nd of September, breathing was very labored. At this time the neck was sensitive, with some swelling an inch above the sternum, extending to the thyroid cartilage. The movements of the head were very guarded.

A metal probe did not detect the foreign body, though it met resistance a little below the thyroid cartilage. The history of the case, the tenderness of the neck with the swelling, made the diagnosis very certain.

September the 4th, assisted by Drs. Gregory, McDowell, Green and Boutwell, having the patient under ether, I made an incision three inches long, beginning near the sternum, and following the inner border of the sterno-cleido-mastoid muscle, of the left side; in this line the deep fascia was cut through; the loose connective tissue was torn through with forceps and grooved director. At the outer border of the sterno-hyoid muscle, the sterno-thyroid was cut, and with the grooved director the Œsophagus was brought into view. A finger pressed on the right side made the foreign body project; the point of the knife reached it easily. Through this opening one branch of the jackstone protruded. Seizing this with a forceps, the opening was enlarged with the point of a grooved director; and by turning the foreign body another branch was delivered, and so three others, when the body was fully removed. As the boy had stated, it proved to be a cast-iron jackstone, measuring, from extreme points, one and one-half inches. Cloths wet in cold water were applied to the wound, and the patient allowed liquid food, about one-third of which escaped through the opening.

September 8th.—Some frothy mucus was found in the wound, the gas being the product of decomposition in the wound, the deeper parts of which were covered with a thin gray slough.

September 9th.—But a small part of the liquids taken pass through the wound. Gas still escaping in bubbles from the depth.

September 17th.—The patient presented himself at my office, the wound healing nicely, no liquid or gas now escapes from the wound.

October 3rd.—The boy is much improved in general health, and external wound nearly closed.

April 15th, 1878.—The patient has no difficulty in swallowing.

CASE II.—November 23rd, 1879, John Hawkins aged 1 year, having a button in his mouth, it slipped into the œsophagus. The child was brought to me November 26th. Breathing was somewhat noisy; swallowing difficult; child feverish. I passed a loop of wire down the œsophagus, and caught the foreign body, but found it firmly fixed. The wire loop slipped off the body and it remained undisturbed. Several unsuccessful attempts were thus made.

November 27th.—Having procured Dunham's forceps, another effort was made to remove the body through the mouth. The button was seized, but being very firmly held in the œsophagus, it could not be withdrawn with this ingenious instrument. The patient was put under chloroform, the head well thrown back, the face turned to the right; I made an incision along the lower end of the left sterno-cleido-mastoid muscle, about two inches long. The connective tissue was separated with forceps and grooved director, until the œsophagus was reached. I then passed a block-tin bougie, No. 12, into the throat, turned its point to left side, and with it caused the œsophagus to project into the incision. The knife punctured the œsophagus, and reached the bougie; this small opening was enlarged with tearing scissors, the bougie still remaining as a guide. The looped end of a large hair-pin, bent on the flat, near the end, was now passed into the œsophagus above the bougie, and made to hold the opening free, while it drew up the œsophagus and fixed it. The block-tin bougie was now withdrawn. A probe passed downward in the œsophagus, detected the button opposite the upper end of the sternum. With a dentist's hook the button was turned with its edge upwards, then seized with a strong forceps and brought out. It proved to be a double convex button of vegetable ivory, and measures three-fourths of an inch in diameter.

A cloth wet in water was applied to the wound. For sixteen days the milk taken as food escaped in part from the wound. No unfavorable symptoms occurred. Patient discharged December the 7th, with the wound nearly healed.

April 26th, 1880.—The patient swallows without difficulty and is entirely well.

CASE OF IMPERMEABLE STRICTURE.

REPORTED BY E. J. STUDER, M. D.

Peter Powers, 29 years of age, brakeman by occupation, was admitted to the City Hospital January 4th, 1880. He had long suffered from organic stricture, the result of a chronic gonorrhea, for which he had been treated by several gentlemen of this city, but without success, for he had retention of urine in August '79, rupture of the urethra and perineal extravasation of urine, followed by perineal urinary fistula.

The history of his subsequent treatment, as given by him, was not very clear or satisfactory, being briefly that he had been treated by attempted simple dilatation during which the attendant had informed him that a false passage had been accidentally made, but that at no time had any instrument been successfully passed into the bladder.

His condition when admitted was found to be as follows; passed all his urine through a fistula which opened an inch to the right of the urethra and a little above the line of the bulb with the exception of an occasional drop voided by the meatus, his urine was constantly loaded with mucus and pus, and gave an alkaline reaction. The bladder was so irritable that he not unfrequently remained over a vessel for hours, and the intervals between evacuations were always short. There was longitudinal induration (as described by Dr. Lankford at the time) extending upwards from the bulb, two inches, and this was quite as long as an adult finger, to the touch. No instrument would pass into this portion of the urethra more than half an inch. For six weeks after his admission, Dr. Dean, the Superintendent, Professors Hodgen and Lankford, Dr. Hunicke and others, tried repeatedly and with much patience and perseverance to pass some guide through to the bladder, but not the smallest whalebone guide, or even horse-hair could be passed. In consultation, therefore, it was decided by Drs. Dean and Lankford to perform "external urethrotomy," or open the constricted urethra from without. The patient being placed in

the lithotomy position and anæsthetized with ether, Dr. Lankford assisted by Dr. Dean and others, performed the operation known as "Wheelhouse's Method" of external urethrotomy. As a description of this procedure has been extensively copied in medical journals, and the latest edition of surgical works, it is unnecessary to repeat it here. It is enough to say, as Professor Lankford admitted at the time, that it is not at all probable that the *natural canal* would have been found, and the bladder entered from the meatus by a No. 10 (Eng.) catheter by any other method, as was the case here. The induration was so long, the perineal tissue so altered by inflammation, and the stricture so tortuous, that even by this precise operation considerable time was consumed in the careful and tedious dissection. It was impossible, after opening the urethra one-fourth of an inch above the stricture, and finding the natural opening, to pass the guide—the smallest bulb-pointed silver probe—through the strictured portion at once, as Wheelhouse directs, but it was insinuated along little by little, cutting after the probe until the healthy portion of the canal was reached and the catheter passed to the bladder. He was not molested for two days, when the same sized instrument was passed with ease. On the evening of the third day he passed all his urine, a full, bold stream, by the natural way; this continued until the seventh day when the urine began to pass in part through the cut again, but this lasted only three days, when he again began to pass all his urine in the natural way, and in a full stream. The cut healed rapidly, and he was discharged "well." Dr. Lankford presented him to the class five days before this, thirteen days after the operation, for the last time, as entirely recovered. From his remarks at the time, as also the general history of the case, the following brief summary is presented in conclusion:

1. That in old tortuous indurated strictures complicated by fistula, it is bad practice to persevere very long in other measures than those similar to the above operation, because this case proved by the efforts and treatment of some of our best men, that a stricture may be permeable to the urine and not to an instrument, and that they are therefore useless.

2. That external urethrotomy by the above method is in such cases the safest, speediest and most reliable practice. It is much less likely to be followed by incidental diseases, such

as rigors, fever, septicemia, extravasation, diffuse inflammation etc., (still it will not be understood that we mean to claim that *all* cases will terminate so rapidly and favorably as this).

3. When the case is complicated by cystitis, as this was, by giving a free and easy escape to the urine, we give rest to the bladder as no other procedure can. This patient not only improved rapidly, but surely; micturition was reduced to four times in twenty-four hours, while his actual increase in weight was about one pound per day.

4. It restores the *natural canal*, which according to Sir H. Thompson's school, Syme's method and similar procedures never or rarely ever does.

It would be unfair to close without again repeating the warning that such marked and speedy results cannot uniformly be predicted as in this one case; but they are possible. The patient was cautioned about the occasional passage of a large instrument if he would maintain his success, and prevent recontraction.

TRANSLATIONS.

ANÆSTHESIA BY THE MIXTURE OF PROTOXIDE OF NITROGEN AND OXYGEN, BY THE METHOD OF M. PAUL BERT.

For some time the attention of the scientific world has been attracted to the new means of producing anæsthesia by the mixture of protoxide of nitrogen and oxygen, administered under pressure, according to the method of M. Paul Bert.

Professor Derobaix, who strongly desired to test the value of M. Paul Bert's discovery, has been in exceptionally favorable circumstances for this purpose. In the first place, he was assured of the coöperation of M. Dehaut, chemist, who had been to Paris to study the processes and practical applications with M. Paul Bert himself, and with MM. Péan and Labbé. Then he was enabled to make use of the apparatus of the Pneumo-therapeutic Institute, recently founded at Brussels

for the purpose of treating, by new and special measures, diseases of the respiratory passages. The officers of the establishment had the courtesy to place at his disposal the principal "bell."

This subject is still quite new, and the number of operators making use of the new method is quite limited, on account of which, the report which follows appears to us not devoid of interest. In fact, to our knowledge, MM. Péan and Labbé, of Paris, are the only ones to this day who have made use of it. It is, however, we believe, destined to render good service in the future. What comfort to the surgeon if he were hereafter certain of no more being exposed to the catastrophes which, unfortunately, have been only too frequent after the administration of ordinary anæsthetics, and of which the list still increases every day! * * * * *

The first experiments were made April 20th, 1880. The mixed gases had been compressed at five atmospheres in a receptacle of a capacity of 300 liters, placed near the "bell." This is composed of three apartments: 1st. A large hall where the operations are made, and where a dozen persons can find themselves comparatively at ease; 2d. An ante-chamber separated from this by a movable door, designed to receive the patients; 3d. A little passage-way, serving to prepare the instruments and all the objects necessary for the dressing. Five windows give access to light in the upper part; the lateral walls are also pierced with five similar windows, which permits communication by writing or by gesture with the engineer or other person outside. The manometer faces one of these, and can be consulted at each instant, as well from the interior as from the exterior. A drum whose two ends are closed with little doors which may be opened successively, allows the reception of articles from outside without changing the pressure. The air, compressed by a steam engine of eight-horse power, reaches the bell at its lower part, and the pressure increases without one's perceiving any other sensation than a certain tension of the tympanum, which the movements of swallowing easily put an end to. The supplies of anæsthetic gas are provided by means of an india-rubber connection, and stored in a bellows-sack placed under the table, and retained at the sides by a lattice in such a way as not to inconvenience the operator.

The first subject submitted to the influence of the mixture of protoxide of nitrogen and oxygen, was a woman of forty-seven years, a day-laborer, of miserable constitution, affected with caries of the great toe. Her pulse in the open air beat twenty-eight to the quarter, and thirty-five under pressure. This reached nineteen centimeters of mercury at the end of twenty minutes, during which were made all the necessary preparations for the operation and for the carbolized dressing; for in all cases the method of Lister was to be applied in all its strictness.

At one minute past two o'clock, everything was properly arranged, the administration of the anæsthetic mixture was commenced by M. Dehaut, by means of Clover's mouth-piece with valves. At three minutes past two the pulse beat thirty-two to the quarter; muscular relaxation was not quite complete; the patient still made some movements of flexion and extension of the fingers; but she had become perfectly insensible. Sleep came on without any period of excitement. During these two minutes she was pinched at different times, to determine the degree of sensibility, and she said two or three times, "I still feel." That was all. At this moment the incision was made. All went well during the two minutes following; but at five minutes past two the patient made some movements of her legs and arms; immediately the stop-cock which gives admission to the compressed air was opened so as to increase slightly the pressure. Thirty seconds pass and the arms fall, while the movements still persist in the limbs. The respiration is regular and appears not to have changed in character. The pulse has not changed in frequency. We remark only that from time to time, certain pulsations are weaker than others, and in consequence it is often difficult to count them exactly. At seven and a half minutes past two the amputation being terminated and the dressing almost completely applied, the mask was raised. The arms at that moment were rigid. At the end of twenty-five seconds the patient awoke all at once and sat up. She wept some moments, then thanked effusively all the assistants, whom she wished to embrace. She complained of a sense of warmth. At this moment the pressure was at twenty. Questioned as to her sensations, she responded that she believed she was in heaven.

When the dressing was completed, the woman descended

from the table without assistance and returned to the ante-chamber. At a visit made to her two hours later, she complained only of a little pain in the foot. None of the discomforts consequent upon the inhalation of chloroform were produced. No malaise, no nausea. By way of precaution she had abstained from dining at noon, but had eaten a good breakfast in the morning. So she complained of devouring hunger, and was instructed to satisfy her appetite.

Case II. A man whose forearm had been crushed by machinery. Diffuse inflammation and suppuration followed, involving all the tissues. Though for a long time it seemed probable that amputation would be necessary, all had become cicatrized and there was only a stiffness of all the joints of the fingers and wrist, such that he could not move them at all.

Pressure twenty. Pulse in open air twenty-two [to the quarter], now thirty-one. Administration of protoxide at 2h. 15m. The patient being somewhat addicted to the use of alcohol, there was a period of excitation. At 2h. 16m. he cried, gesticulated and made faces. At 2h. 18m. muscular rigidity, extension of the limbs. The cries grew fainter, thirty minutes later, snoring. The rigidity persisted but insensibility was complete. We commenced passive movements of the anchylosed joints. At 2h. 19m. the muscular rigidity still persisted. The mask was raised, and in this case as in the preceding, at the end of twenty-five seconds, watch in hand, the patient awoke suddenly, looked around, and raised himself up. He was bathed with sweat, had felt nothing, believed himself upon a pleasure train, then occupied with striking upon an anvil. Toward the end of the operation a slight cyanotic color of the face was observed. Intoxication for a few moments. Pulse twenty-six. He descended from the table without assistance and conversed as if nothing had happened. There was no pain in the wrist, and already he made some slight voluntary movement. At 2h. 31½m. the pressure in the "bell" had become normal and the doors were opened. During the operation the temperature was considerably elevated in consequence of the compression of air and the presence of nine persons in the "bell." When the stop-cock was opened and the air commenced to escape, the opposite phenomena were naturally produced, according to physical laws of the expansion of gases. Toward the very end, quite a thick mist prevailed in the room,

but these variations of temperature were of too short duration to be disagreeable.

April 27th a more extended trial was made. Measures had been adopted to secure the purification of the air in the "bell," by forcing it through a solution of potash so as to remove the carbonic acid. Prof. Deroubaix, with five other physicians and four patients, entered the "bell," and compression was commenced at 3h. 9m. The thermometer then marked 17° C. (62.6° F.). At 3h. 26m. it showed 19.05° C. (66.29° F.), the pressure being twenty-five centimeters of mercury.

The first patient was a woman with retro-mammary abscess, due to a periostitis of two ribs. There were fistulous tracks to be scraped, and the operation was much more extensive and prolonged than was at first anticipated. In open air her pulse beat twenty-five to the quarter; it arose, under pressure to twenty-eight, and was a little more feeble. At 3 hours, 27½ minutes, administration of the gas; 3 hours, 29 minutes, contractions; the patient moved her eyelids, kept the eyes open; the look presented nothing abnormal; pupils normal. Anæsthesia complete, and the operation was commenced. At 3 hours, 30 minutes, the limbs remained in extension; the fists were closed. The pressure was increased. At 3 hours, 34½ minutes, the pressure 27½; 3 hours, 35 minutes, she still moved her arms a little and the fists were closed. 3 hours, 40 minutes, respiration was regular, but presented the abdominal type very strongly marked. Slight movements; these in general were not made without external stimulation; the limbs remained slightly rigid, extended and quiet; but if one takes hold of them to see if complete relaxation has supervened, the patient then makes some movements—slow, it is true, but quite pronounced. 3 hours, 47½ minutes, snoring; 3 hours, 48½ minutes, end of the operation. The dressing was commenced and the mask was removed. Fifty seconds for the awakening. The patient sat up, conversed a little, with an indifferent, morose manner. She remained in this state to the end of the dressing. Pulse, after awakening, thirty to the quarter, feeble. She passed into the ante-chamber. Some moments later she vomited some glairy matter, not having taken any nourishment since nine o'clock in the morning. This discomfort was transient. On going out from the "bell," at five o'clock, all disposition to vomiting had disappeared for some time.

CASE II.—Operation for scraping and Lister's method, in a circular lupus of the fore-arm and wrist, in a young man of twenty-two years. Pulse in open air, twenty-two; under a pressure of twenty-nine centimeters, twenty-three to the quarter. Beginning of inhalation at 4 hours, $3\frac{1}{2}$ minutes. One minute later there was twitching of the left thigh. At 4 hours, 5 minutes, rigidity of the limb; anæsthesia. The operation of scraping commenced; 4 hours, 6 minutes, movements of the legs, abdominal respiration; 4 hours, $6\frac{1}{2}$ minutes, snoring. The eyes, as in the first case, were open, pupils normal. At 4 hours, 7 minutes, relaxation of the upper limbs, the lower ones still move slightly; 4 hours, 9 minutes, relaxation of the lower limbs; 4 hours, 10 minutes, operation terminated, and carbolyzed dressing applied; thirty-three seconds for awakening. Face bathed in sweat. Being questioned, he declared that he had absolutely felt nothing; had no recollection of any dream; no pain in the wrist. As soon as awakened he found himself in a normal condition. No delirium, no hebetude, no malaise. Pressure at the end of the operation, twenty-eight; pulse, nineteen.

CASE III.—Fistula of left trochanteric region, with a long, ascending passage, in a young man of eighteen years. Pulse in open air, twenty-two; under pressure, nineteen. Patient was placed in right lateral decubitus. Inhalation at 4 hours, 20 minutes; twenty seconds later the patient began to snore. After half a minute insensibility, and the operation was commenced. At 4 hours, 22 minutes, he moved his limbs when they were stirred; eyes open, pupils normal, respiration regular; 4 hours, 24 minutes, snoring continued; calm sleep, rosy color of face, sweat; 4 hours, 26 minutes, cornea still sensitive; 4 hours, 31 minutes, cornea not sensitive, relaxation of arms and legs. End of operation at 4 hours, 35 minutes. It is difficult in this case to tell exactly how many seconds passed in the awakening; less than thirty seconds after the removal of the mask, there were efforts to vomit, so that he was unable to respond to questions which were addressed to him. At the end of a minute he was quite evidently awakened; countenance slightly injected, and appearing a little cyanosed; a little later, paleness. The patient said that he had slept well, but at the beginning he continued to see the operators, though being asleep and insensible. He had not dreamed. There

was heat and sweat. He raised himself up, but almost immediately vomited several mouthfuls of stringy fluid. His last meal had been at nine o'clock in the morning. With him the malaise was quite prolonged, and it was only after being put to bed that he felt completely relieved. He lacked appetite during the day and did not sleep well at night. He had no hunger in the morning. This seemed to be due to the severe pain produced by the wound.

CASE IV.—The patient with ankylosis of the wrist already mentioned as operated upon at the previous occasion. Pulse, in open air, twenty-six; under a pressure of twenty-seven, beat twenty-three. Beginning of inhalation at 4 hours, 46 minutes; one and one-half minutes afterwards, slight dilatation of the pupils, rigidity and anæsthesia. Passive movement were made; 4 hours, 48½ minutes, the patient uttered some moans, but gave no other signs of pain. End of the operation at 4 hours, 50 minutes. Removal of the mask, awakening in twenty-five seconds. The moans persisted after the cessation of the forced movements and the removal of the mask, which proves that they did not depend upon sensations perceived by the patient. Having recovered himself, he declared that he had felt nothing; he actually experienced no pain in the hand. No sweating. He arose quickly, as the first time, and was affected as previously. Pulse twenty-three, temperature of the air 21° C. (69.8° F.)

Remarks.—From the observations which precede, two facts appear with undeniable clearness. The rapidity of the anæsthesia which occurs in from one-half to three minutes; the absence of the period of excitation, so distressing and long with chloroform; for the slight agitation noted in the second case, in no degree recalls, thanks to its brevity and its insignificance, the corresponding phenomena produced by other anæsthetics. With this exception, the five other times, the patients slept without making a movement, a grimace or speaking a word. The second capital point is the wonderful and constant rapidity of the awakening. On this side, consequently, every security appears assured to the surgeon. It does not seem that he should have fears any more during the anæsthesia itself; the pulse and respiration are always regular and calm. In some patients the respiration has changed character and taken a very decided abdominal type. As to cyanosis, it was

scarcely noticeable; it lasted only a few moments in two cases, and was only mentioned in order to assure the most rigorous exactness in the enumeration of all the phenomena observed.

Four times out of six the individuals under experiment felt absolutely no discomfort after the inhalation of the mixed gases. They returned completely to the normal state. The young lad affected with fistula of the trochanteric region, was already indisposed before the operation, by reason of the high temperature of the confined atmosphere. It appears that he felt ill, every time that he was placed in similar conditions. The efforts at vomiting were not very violent nor long protracted; in this respect, however, our hopes have been disappointed. We still wait for complete innocuousness.

Sufficient insensibility for an operation occurs before muscular relaxation. The muscles remain in action and the limbs in extension, long after complete anæsthesia. A singular thing, it appears to us, that the upper limbs relax before the lower. Summing it all up, the method of M. Paul Bert offers unquestionable advantages, which amply compensate for the difficulties and discomforts of the exceptional conditions to which surgeon, assistants and patients must subject themselves.

Such is the opinion which we have formed by the observation of these six cases. Will further experience force us to modify it? It is not probable, for the results are so concordant. At the same time the trial is not ended, and if new facts are developed, they will be related in a new article.—*La Presse Médicale Belge*, May 9th, '80.

MESMERISM.

INVESTIGATIONS OF PROFESSOR HEIDENHAIN IN Breslau.

Reported by Professor Senator before the Medical Society of Berlin.

Gentlemen :—Willingly yielding to your wish that I should give a report of the experiments upon the hypnotic condition made by Professor Heidenhain in Breslau, I beg that the incompleteness of my report will be excused, as I am not yet fully prepared to make such a report.

I need not remark, that I have regarded these experiments with the greatest skepticism, but I am now convinced that there is no deception, intentional or unintentional. The name of Professor Heidenhain is sufficient guaranty, who has conducted his experiments with the utmost thoroughness, and has kindly allowed me to be a witness with him. The matter investigated is this: Persons by quite simple procedures are thrown into such a condition, that they become, so to speak, involuntary instruments in the hands of those who manipulate them. This procedure consists in causing the object of experiment to gaze fixedly for some time upon a bright object, as a glass knob or the like, and afterwards the operator making passages over the face with the finger-tips so lightly that the skin is scarcely touched, or not at all, or he lays the warm hand upon the forehead; he may also stroke the hair gently, etc.

Many yield to one of these methods, others require that several, one after the other be followed, and for a considerable length of time. Professor Berger, of Breslau, so it is said, has accomplished the same result, simply by bringing near the face a warmed metal plate. All persons are not so susceptible, are not "Mediums." Many, especially after being frequently experimented upon, are so susceptible that they fall into the hypnotic state when looked upon fixedly, or when ordered to fix their attention. This was the condition of the gentleman whom Professor Heidenhain allowed me to examine. They were all physicians or medical students, and simulation by them was not to be thought of.

So far as I have observed, the hypnotic condition began with these symptoms: The individual commenced to breathe deeply and frequently with closed eyes, became at the same time pale, and the eyelids betrayed a trembling movement. In this state the "mediums" imitate what they see or hear. They can easily see, as the eyes are not fully closed; at least they are not always closed, a small opening remains. If the operator folds the hands, they also fold the hands. Walk in front of them, they imitate the movement, but as though in a deep sleep. When the eyelids are fast closed so that they can not see, they will walk if one steps noisily, being impelled to the motion by the sound only. Similar movements may be made before them and will be likewise imitated.

But what is specially astonishing and capable of throwing some light upon these facts, is in the following observations to which Professor Berger first called attention. A patient whom he had put in the hypnotic state and whom he was about to subject to the electric current, began to speak or to make a sound at the moment he placed the electrode upon the nape and before the current had begun to pass. Heidenhain pursued this discovery and learned something more. Not only when the neck in the region of the upper cervical muscles is pressed upon or stroked, do the hypnotized subjects begin to speak, and, indeed, to repeat what is said to them in a loud tone, but also when other places are thus manipulated, as the epigastrium, apparently at the spot under which the stomach lies in immediate contact with the abdominal wall, and the anterior wall of the larynx. When these places are stroked, and we then speak loudly through a hollow cylinder against them, the subjects mechanically repeat the words. This result will not follow if the experiment be made away from the described regions, even if the change in position be but slight. Heidenhain suspects that these phenomena are due to an irritation of the vagus nerve, which, through reflex action, excites the vocal apparatus. The utterances seem, of themselves, as though the speaker were in a deep slumber, and with great difficulty pronounced the words.

Very remarkable are other observations which remind one of the peculiar reflex phenomena studied by Prof. Goltz. The reaction upon stroking the neck already described, is strongly analogous. But more yet! One subject whom Prof. Heiden-

hain demonstrated to me, exhibited the following movements when the lateral region of the spine in the lumbar region was stroked; the leg on the same side made scraping movements backwards and could be kept in the position thus attained. Repetition of the stroking caused fresh movements of the same character, and so on until the limb assumed a most unnatural position, and the subject had to be supported lest he should fall. Similar treatment of the other side elicited a similar result. This experiment corresponds probably to the well known scratching actions in Goltz's dogs.

There was noticed in some that the muscles at the beginning of hypnosis fell into a tetanic rigidity, or into clonic convulsions. In one person these convulsions were so violent, that for fear of general spasms, he was aroused as soon as possible. Recently, it has been discovered that the convulsions can be checked by applying to the extremity affected any cold object. In some very sensitive "mediums" the convulsions cease in both extremities when only one is touched with a cold metal plate.

Prof. Heidenhain finds that among ten persons, three or four only are "mediums." This proportion depends much upon the occupation, mode of life, rank in society. But it is by no means merely the hysterical, nervous and anemic who are thus affected.

The explanation of these phenomena is probably this: The gray matter of the cerebrum (gray matter of the convolutions) is exhausted by certain fatiguing procedures, and thereby consciousness and the will, as well as the regulation of reflex action are suspended, and as a consequence certain habitual motions, (walking, speaking, writing) take place upon peripheral irritation, sensual impressions, in general, upon excitation that passes inwards to the basal ganglia, and thence avoiding the cortical region, to the periphery again. Naturally through such channels will responses be obtained as are most frequently traversed by impulses, centripetal and centrifugal; hence many will readily exhibit special movements in imitation, which in the case of others will not appear, or at least will be imitated with difficulty.

I have heard that some subjects retain consciousness. In these cases possibly only that part of the cortex is thrown out of activity, which presides over the will.

Prof. Berger, as I am informed, has observed very strange phenomena in the sick; *e. g.*, paretic patients, when hypnotized, moved the affected limb better, which they had previously but little control over. One with marked locomotor ataxia, walked without staggering for a few moments after he awoke from the hypnotism.

The duration of the hypnotism varies sometimes. I saw it last so long that it had to be artificially put to an end, either because the experiment intended was accomplished, or violent convulsions were feared. The subjects were aroused by fanning, calling, striking, shaking, and the like. Occasionally the state was of short duration, and the manipulations had to be repeated and prolonged.

We stand, gentlemen, upon a new field of investigation; one which promises rich results in the department of nervous physiology.—*Berlin. Klin. Woch.*, May 10, '80.

INTRA-UTERINE VARIOLA.

CASES REPORTED BEFORE THE PARIS ACADEMY OF MEDICINE.

M. Depaul reported: A woman aged 33 years, presented herself at the Hospital, March 12th; she was pregnant and had had variola a few weeks back, of which, however, she bore no trace. April 30th, she aborted; male child, weighing 820 grammes, and apparently dead one month. It exhibited all the cutaneous signs of a non-confluent variola. Upon the placenta were a large number of fatty-degenerated villousities, so that it was uncertain whether the placental disease or the variola destroyed the fetus.

M. Blot: Woman five months pregnant, had visited a friend sick of variola; a few days later, at about the fifth month she aborted. The fetus was covered with variolous pustules, while the mother had none.

M. de Villiers had seen a similar case in an infant born at the seventh month.—*Gazette Heb.*, May 7, '80.

A CASE OF MACROGLOSSA.

At the clinic of Professor Gosselin, was presented a remarkable and quite rare example of hypertrophy of the tongue with projection outwards, in a child aged four years. The tongue not only fills all the buccal cavity, but separates the lips and projects about three centimetres. It is broad, thick, of a consistence a little more firm than usual, of an appearance otherwise nearly normal, aside from a sort of general turgescence and some small excoriations here and there.

M. Gosselin reached the diagnosis of hypertrophy by a process of exclusion. According to the information derived from the parent, the child always had a large tongue, but it is only gradually that it has increased to the extent of projecting from the mouth. The child has never been able to nurse, but has always been fed artificially. Now it can only take liquid food and pap; he cannot chew without risk of biting the tongue.

M. Gosselin, fearing hemorrhage, even with the ecraseur, considering the turgescence of the tongue and the free bleeding provoked by a simple exploratory puncture, stopped with the application of a ligature. After having first passed a loop of thread through the front part of the tongue to draw it out and hold it more easily outside, he traversed the tongue in the median line from below upwards and a little backward on a line with the dental arches, with a thread and needle which served afterward to carry through caoutchouc threads, by the aid of which the two halves of the tongue have been strongly constricted. He reserves the question whether ultimately he will not have to make use of the thermo-cautery to terminate the operation.—*Gazette des Hôpitaux*, April 24, '80.

REPORTS ON PROGRESS.

MONTHLY REPORT ON THE PROGRESS OF THERAPEUTICS.

Local Treatment of Small-pox Eruption with Carbolic Acid.—DR. SCHWIMMER, in the *Deutsches Archiv*, describes his method of applying Lister's carbolic acid paste, in small-pox, with the view of preventing pitting. The paste (acid. carbolic. 4.0—10.0; olei oliv., 40.0; cretæ trit. alb., 60.0) is applied to the face upon a linen mask, with openings for nose, mouth and eyes. Strips of linen suffice for the arms and hands. These applications are left undisturbed for twelve hours, when fresh ones can be substituted. Suppuration is greatly shortened and the intensity diminished. While in parts without treatment, the stage of dessication appeared between the thirteenth and fifteenth day, on the face it set in by the ninth to eleventh day. There was no excessive suppuration upon the face. Upon the commencement of dessication, the mask was usually removed. Ten to fourteen days after complete dessication, the skin of the face, was free from all traces of the disease; or at utmost, spots of pigment were visible that gradually disappeared.—*Berlin. Klin. Woch.*, May 10, '80.

Hydriodic Acid in Asthma.—OLIVER recommends large doses of iodide of potassium in asthma, and where patients cannot bear this remedy, he uses hydriodic acid. He commences with doses of twenty or thirty drops of the syrup of hydriodic acid well diluted with water, and taken about half an hour before meals; if taken after meals it may disturb the stomach, set up fermentation, and cause colic, acid stomach and pain in the head. Increase the dose gradually, and a tablespoonful dose should not be exceeded.—*Boston Med. and Surg. Jour.*, March 4, '80.

Nitrate of Uranium in Diabetes.—DALE reports excellent results from the use of nitrate of uranium in doses of one or two grains three times a day, in the treatment of diabetes.—*Boston Med. and Surg. Jour.*, Feb. 26, '80.

Bromides in Sea-sickness.—BEARD administers full doses, say thirty, sixty or ninety grains of the bromide of sodium, three times a day, commencing three or four days before starting and continuing it upon the voyage as long as may be necessary. The sodium bromide is preferable to the others, as less liable to derange the stomach; but the others may be used when this cannot readily be obtained. It is given preferably in cold or ice-cold water. It must be given to the extent of producing mild bromization, anything short of this is useless. When the bromide has not been taken early, or when there is an idiosyncrasy which prevents the administration of that remedy, good results are often obtained from atropia in doses of from one one-hundredth to one-twenty-fifth of a grain, hypodermically or by the mouth, repeated with sufficient frequency to produce great dryness of the mouth. In some cases atropia in skillful hands is sufficient of itself without the bromides.

The powdered citrate of caffen in two or three grain doses will generally relieve the sick-headache.—*Medical Gazette*, May 15, '80.

Tonic Glycerine.—DR. LARMAUDE finds the following an excellent substitute for cod-liver oil with patients who cannot take that remedy: Pure glycerine, 300 grammes, tincture of iodine, 30 drops; iodide of potassium, 30 centigrammes. A tablespoonful a quarter of an hour before each meal. The appetite soon returns, and constipation, when present, soon disappears. For children and delicate persons, he employs 50 grammes of syrup of raspberries and 250 of glycerine. *Rev. Méd.*, April, 3.—*Med. Times and Gazette*, April 24, '80.

Oxalic Acid in Diphtheria.—CORILLEAU recommends a new remedy for diphtheria, namely, oxalic acid. He gives it thus: Oxalic acid, a gramme and one-half; syrup of orange, thirty grammes; infusion of green tea, one hundred and twenty grammes. Deserts spoonful every three hours. Corilleau lost but one of the eighteen cases in which he adopted this treatment.—*Boston Med. and Surg. Jour.*, Feb. 26, '80.

Cosmoline in Phthisis.—W. W. CARPENTER writes that fluid cosmoline contains all the virtues of petroleum without the disagreeable, pungent properties. He finds it more efficient and more readily tolerated than cod liver oil, and believes it the best remedy yet found for phthisis.—*Western Lancet*, May, '80.

Oxalate of Cerium as a Cough Remedy.—A committee of the New York Therapeutical Society presented a report at the meeting held April 9th, in which the following conclusions were reached:

1. Oxalate of cerium could be safely administered in doses of ten grains, three times a day, for many days in succession.

2. The only unpleasant symptom, when so used, was slight dryness of the mouth that appeared after several days.

3. It was probably most efficient when administered dry upon the tongue.

4. Its effects were not produced until two or three days after its use was begun, and lasted for two or three days after the remedy was discontinued.

5. It was most efficacious in the treatment of chronic cough, and the initial dose should be five grains.

6. In the majority of cases it had not proved an efficient cough medicine for any considerable length of time, but could be regarded as a valuable agent to be employed in alternation with other remedies.

7. It did not disturb the stomach, on the contrary, it relieved nausea and improved digestion.

8. Different preparations upon the market were not equal in value, and when success was not attained by one, another should be substituted.—*Medical Record*, May 1, '80.

Crude Petroleum in Pulmonary Diseases.—DR. VAUDOIS in *Le Progrès Médical* and Dr. Montré in *La Gazette des Hopitaux* state that under the name of "Oil of Gabian," crude petroleum has been administered in capsules of jujube paste, to patients suffering from various pulmonary affections. It is said that these diseases are almost unknown among the inhabitants of "oil regions;" and the workmen at the wells and others who handle the crude petroleum have circulated reports of this sort; and patients suffering with chronic bronchitis, asthma, and catarrhal bronchorrhea have employed the petroleum with success. Drs. Millard and Blache have tried the capsules prepared by M. Gardy, both in hospital and private practice in Paris, and report most satisfactory results.

Careful experimentation has shown that the petroleum is eliminated by the pulmonary mucous membrane which it modifies in its passage.

Refined petroleum or kerosene oil does not possess the therapeutic properties which have been found in the crude oil.

EDITORIAL.

VOL. III.

JUNE, 1880.

No. 6.

GERM THEORY APPLIED TO FURUNCLE, OSTEOMYELITIS AND PUERPERAL FEVER.

In the April number of the *COURIER* appeared an account of Pasteur's exceedingly interesting discoveries as to the nature of the disease known as the "Cholera of Fowls." He found in excrement of fowls affected with this disease, minute organisms comparable to the bacteria, which could be readily cultivated in chicken broth. A small drop of this infected broth injected under the skin of a healthy bird, one never affected with the disease, or given with the food, speedily excited all the symptoms of the "cholera" together with fatal results. A modified solution thus injected, produced a local abscess, but no general symptoms, while the bird was manifestly *protected* against contracting the true cholera, as was proven by experiment. This discovery naturally has excited much interest, the results are analogous to those of vaccination as regards variola.

Pasteur, at a recent session of the French Academy of Medicine, May, 1880, reports having discovered in several common diseases, microscopic bodies in the fluids, to the presence of which may be ascribed the diseases themselves. The first is the furuncle. Pasteur examined pus taken from furuncles, and discovered a minute organism formed by two spherical specks united together.

In the pus of osteomyelitis he found a great quantity of organisms similar to those of the furuncular pus, which led him to state that the case of osteomyelitis examined, might be regarded as an osseous furuncle.

A number of cases of puerperal fever examined, afforded decided results. The lochial discharges contained quantities of microscopic organisms of various sorts. The blood harbored a body much like that found in the pus of furuncles, but still sufficiently distinct to be recognized. Pasteur gave this explanation of the cause of death in puerperal fever: The injuries of the uterus, after delivery, give rise to a purulent discharge which affords a virus for germs; these subsequently penetrate into the organism by the lymphatics. Evidently the antiseptic method of treatment is naturally indicated. While the carbolic acid is very useful, Pasteur prefers the use of concentrated solutions of boracic acid; this agent does not irritate mucous membranes, which is a most valuable property. Pasteur proposes the application of compresses, impregnated with boracic acid, to the genitals of recently delivered women.

It may be here mentioned that boracic acid or sodium borate, the common borax, which is an invaluable application to the suppurating mucous membrane of the middle ear, is also indicated because of its antiseptic and bland nature, in cases of offensive discharge from the nasal passages. Undoubtedly in this drug we have a very valuable antiseptic, which, in many cases, is preferable to carbolic acid, since it is eminently non-irritating; hence it can be freely used in the form of powder, and as such may well be introduced into the diseased cavity of the vagina or uterus by insufflation, a method much to be preferred in the treatment of aural discharges.

BROMIDE OF ETHYL.

During the last few months many careful observers have made use of this anæsthetic, from which so much was anticipated. It has been used with considerable success and satisfaction by some surgeons in different parts of the country, and some have given it unqualified commendation. The experience of others, however, has been less pleasing; and in some cases very alarming symptoms have occurred, while in one case death has followed its use during a protracted operation with such symptoms, that Dr. Sims, the operator, has considered that the anæsthetic was the cause of the fatal issue.

In the *Philadelphia Medical Times*, of April 24th, Dr. H. C. Wood published the results of some experiments made upon dogs, with the purpose of determining whether the bromide of ethyl exerts a depressant effect upon the arterial pressure, as does chloroform, or whether it has such stimulant properties as characterize the action of ether.

The result of the experiments shows, that while anæsthesia may be produced by bromide of ethyl without reduction of the blood pressure, it is nevertheless distinctly and decidedly depressant in its action; and that the depressant action may occur very suddenly—in one case the pressure falling over forty per cent. in a single minute. In making comparative tests of the influence of bromide of ethyl and chloroform on the same animal, it appeared that the depressant effect of the new anæsthetic was not less than that of the old.

Further experiments, carefully conducted, proved that the drug acts directly upon the heart, as a paralyzant, and therefore resembles chloroform rather than ether, and would be attended by the same dangers.

In regard to the claims made for the bromide of ethyl, that it is free from nauseating tendency, experience of different observers varies. In five cases out of seven in which Dr.

Agnew used the bromide, there was vomiting—in one case severe and prolonged. Dr. F. L. Haynes writes to Dr. Wood that he has sometimes failed to get the patient under the anæsthetic, and has sometimes had the patient wake up in the middle of an operation with violent efforts at vomiting.

In the *Medical Record*, of April 24th, Dr. Donald Maclean, of Ann Arbor, reports one case in which he used the bromide of ethyl. The action of the anæsthetic was not as prompt as it has usually been found, and soon after the inhalation commenced, the head of the patient was drawn violently backward, and his whole muscular system jerked spasmodically. The breathing had become exceedingly rapid and the pulse small. Chloroform was substituted and the operation speedily completed. For four full days following the use of the anæsthetic the patient suffered from headache, vomiting, and general discomfort, and there was the characteristic aroma upon the breath of the patient.

Dr. P. S. Conner, of Cincinnati, reports in the *Lancet and Clinic*, of May 1st, seven cases in which the bromide of ethyl was employed with satisfactory results. It was prompt in producing anæsthesia, and the effects passed off rapidly. In only one of them was nausea produced, and that but slight.

In the first case the pulse-rate and temperature were not taken prior to the operation. The pulse at the end of the first minute, was 120, fell to 92 at the close of the second minute, rose to 132 at the end of five minutes, and maintained this rate with but slight variation, during the remainder of the time of operation. At the fifteenth minute there was noticed a distinct intermission, corresponding to every fourth or fifth contraction of the heart. On withdrawing the anæsthetic for a short time, the heart's action again became regular.

In the second case the pulse-rate at the end of the first minute was 104, at the end of the second minute, 84, at which it remained.

In the third case, "great variations in both pulse-rate and respirations were noticed, during the time that this boy was under the influence of the anæsthetic."

In the fourth case, "the pulse, which before the operation

was 64 per minute, rose to 92 at close of ethylization." In the fifth case, before the ethylization was commenced, the pulse was 120, at the end of the second minute, 152, at end of fourth, 144.

In the sixth case, the pulse-rate was 124 before ethylization, ran up to 160 during the inhalation, and fell to 100 in five minutes after return to consciousness.

No mention is made of the pulse-rate in the last case. The duration of anæsthesia was from two minutes to thirty minutes.

In the *Medical Record*, April 8th, is the report by Dr. Marion Sims, of the use of this anæsthetic, in a case of Battey's operation, where the patient was kept under its influence for an hour and a half. "Her condition was good during the whole time, and her pulse was strong and full. The rapid, short breathing was a peculiar feature; the sensitiveness of the conjunctivæ existed from the beginning to the end of the operation, and her eyeballs were in almost constant motion. There was no unusual dilatation of the pupils. She recovered quickly from the anæsthetic after being put to bed, but she had the most distressing retching and vomiting imaginable." From the moment of returning consciousness she complained of violent pain in the head. During the twenty-one hours that the patient survived the operation, there was almost constant headache, diarrhea and nervous symptoms; urine scanty. The breath and all the evacuations were highly charged with the odor of the ethyl. The same odor was found to pervade all the tissues of the body when the post-mortem examination was made, and persisted for hours in the specimens that were removed.

After careful study of all the symptoms of the case, Dr. Sims is of opinion "that the anæsthetic was the cause of death, while the manner of death may have been by uræmic poisoning."

We are forced to the conclusion that the hoped for anæsthetic has not yet been discovered, or at least that it is not bromide of ethyl; although we are by no means convinced that for operations of short duration this agent will not supercede the other anæsthetics in more general use. The method of Paul Bert of producing anæsthesia, by mixed nitrous oxide

and oxygen, given under pressure, involves too extensive preparations and apparatus, to be available elsewhere than in the best appointed hospitals of the largest cities, even if further experiments confirm the favorable results already reported.¹

ERYTHEMA UTERINUM.

The occurrence of various cutaneous affections in pregnant and puerperal women is fully recognized. Aside from the common forms of eruption, *e. g.*, acne, eczema, pruritus, etc., there have been described the conditions known as herpes gestationis and impetiginiformis, which are inferred to be specific to the pregnant state. Recently, Dr. George H. Kidd, of Dublin, brought under the notice of the Obstetrical Society of that city, a certain erythematous affection of the skin which he described as very common after child-birth, and also occasionally following operations on the uterus.² The efflorescence is of practical importance mostly in a negative way, being of a trivial character as regards the general system, but owing its chief interest to the questions of differential diagnosis involved. The scarlatinal bears a close resemblance to this rash; and as observed at the time by one of the speakers, there was no doubt that erythema occurring in connection with delivery had been frequently mistaken for scarlatina, which would account for the asserted cases of recovery from puerperal scarlet fever, whereas the disease at that period is nearly always fatal. Dr. Kidd draws the following picture of a typical case of erythema uterinum or roseola uterina: On the third, fourth, or fifth day after delivery, attention is called to the condition of the skin of the abdomen by the patient's complaining of its being

¹ See page 555, this number.

² *Dubl. Jour. Med. Sci.*, April, 1880.

itchy and irritable. On making an examination, an eruption is found in broad patches over the abdomen, which in a few hours spreads over the whole of this region. In appearance it so closely resembles a mild scarlatinal eruption that it could not, taken alone, be distinguished from it. Next day the axillæ will present a similar rash, but perhaps paler in color. This will extend over the chest and downwards till it meets that on the abdomen, and upwards covering the neck, but not affecting the face beyond deepening its natural hue. It will creep down the arms, and in many cases affect the hands, on the backs of which it will have a more dusky shade than elsewhere. At the same time it extends down the thighs and legs, and covers the back, but always extending in broad patches. During all this time there is no fever; the pulse and temperature are normal; the lochia and milk are unaffected; the patient takes her food as usual. There is no headache, and no swelling and inflammation of the tonsils. The eruption begins to recede about the end of the second or beginning of the third day after its first appearance. The parts last affected begin to grow pale, and the rash soon disappears entirely, except from the abdomen, where it will remain in patches, it may be, for five or six days. The disappearance of the eruption is not followed by any desquamation of the cuticle, affection of the kidneys, or edema of the extremities, nor does the patient's convalescence seem in any way retarded. There is sometimes a slight vesicular eruption scattered sparsely over the efflorescence. Dr. Kidd looks upon the eruption as due to vasomotor disturbances incident to the condition of the uterus.

SYPHILIS AND MARRIAGE.

No question presented to the medical profession, is fuller of perplexity, more weighted with grave responsibility, than that of the eligibility for marriage of one at any time affected with syphilis. At this day it remains unsettled how long the poison of syphilis may remain in the system. The physician will have the warning consequences arise in mind, of the innocent spouse shattered in constitution, of the offspring spared only to suffer all the malignant evils of inherited syphilis. Well may such a dismal perspective shake his judgment.

Prof. Fournier has published a series of lectures upon the subject of syphilis and marriage, which is reviewed in the *Gazette Hebdom.*, No. 12. The Professor considers the relative pernicious influence upon the child, of syphilis in either parent and also when both are infected. In the latter case the effects of the double diathesis is "disastrous" to the offspring; in the former it is the maternal infection that is most pernicious; intra-uterine death is most frequently referrible to that cause.

A woman, pure above suspicion, married to a man with syphilitic history, yet at the time of marriage without any discernable specific lesion, may, after cohabitation, exhibit cutaneous syphilides, oral mucous patches, cervical glandular enlargement, neuralgias, attacks of intermittent fever, alopecia, etc.; she has contracted secondary syphilis without the primary lesion, and without apparent contact with any of the secondary syphilitic virus. Pregnancy, however, is the prerequisite for the appearance of such symptoms; mere cohabitation will not suffice without consequent conception. She bears within the womb a new being, that, escaping intra-uterine death, comes into the world syphilitic. In such cases the semen, although harmless when inoculated upon a healthy subject, infects the ovum that develops into a syphilitic fetus, which contaminates the system of the mother. But while this

is true, still undoubted syphilitic fathers may have healthy offspring, or may have infected offspring, the mother not being infected.

Fournier states five conditions that must exist, before marriage should be allowed: 1. Absence of actual specific lesions. 2. Advanced period of the diathesis. 3. A certain period of absolute immunity since the last specific manifestations. 4. The character of the disease must not be threatening. 5. A sufficient specific treatment. The first is sufficiently obvious. The fourth is not, in all instances, of easy determination; some attacks of syphilis are light, others are attended by severe lesions, affecting profoundly the bones, skin, muscles, viscera, and occasioning a marked cachexia; in others the symptoms obstinately recur. Sometimes the disease at first mild, after many years develops an extreme malignancy. The more recent the attack, of course, the greater the danger of marital infection. As to the third condition, he considers eighteen months to two years as the minimum, a thorough special treatment having been undergone in the meantime.



A CRIMINAL HANGED AND RESUSCITATED.

The city of Raab, in Hungary, has been the scene of a very remarkable occurrence, which is of considerable professional interest, as well as the occasion of much discussion among the laity.

Le Temps, quoted in *L'Union Médicale*, gives the following account of the circumstances: Toward the end of November, 1878, two women were assassinated on the Bosnian frontier, with unheeded refinement of cruelty, by two Hungarian bandits, who were discovered. One of the two died in prison during the trial of the case; and the other was condemned to the gallows in expiation of his crime. He was named, or rather he is named, Jean Takacs; he is a robust fellow, whom

eighteen months of prison and scurvy have not enfeebled, who still possesses vital force and great muscular elasticity.

The execution took its natural course; the proclamation of the sentence and legal process, lasted, in all, twelve minutes. The executioner was a skillful man, named Kozavex. At the end of two minutes, and after the determination of death by the legal physician, the hanged man was removed, and taken to the dissection room of the hospital of Raab. But at the moment when Professor L. Bierbauer was going to make upon the supposed cadaver, experiments with electricity, he commenced to twitch, and a convulsive rattle came from the throat of the man executed. An indescribable panic took possession of all the attendants. Instructions were immediately demanded from the attorney general, for the unforeseen case of one hanged, whose muscles contracted without the aid of electricity. While awaiting these instructions, they occupied themselves in recalling wholly to life the unfortunate. It was determined that the vertebral column was intact, and that a scorbutic wound, which the hanged man had upon his neck, by reason of the chafing of the cord and the intense pain produced, had brought about a cataleptic state similar to death. The response of the attorney general has been delayed, for he had to apply to the minister of justice in order to have instructions himself. The defender of Takacs, has asked of the emperor, by telegraph, the pardon of the prisoner, who, we must certainly admit, will not be sent a second time to the scaffold. *Non bis in idem.*

According to the last information, there are greatly swollen glands, which prevented the complete interruption of the circulation of the blood and respiration, and consequent strangulation. The executioner has been ordered to Pesth, to give account for his lack of skill. The man executed had been taken down too soon from the gallows, after the determination of death made by Dr. Sikar, deceived in the diagnosis by the catalepsy.

The return to life took place upon the dissection table; the first involuntary movement was to carry his hands behind his head, then he fell into a horrible attack of delirium tremens

and has not yet recovered consciousness. Will the cerebral fever complete the work of the incompetent executioner?

Takacs is a valuable subject for study for science, and it will be interesting in many points of view, that this man should escape death, especially if he come to a condition to reveal to us the true feelings of one truly hung. We might so have an element of appreciation, so as to enable us to choose between decapitation and strangulation, as a sure and prompt means of executing high criminals.

In case the arousing of this man from the state of catalepsy, had been delayed a few moments longer, the phenomena would have been referred to the influence of electricity—another illustration of the necessity of extreme caution in scientific investigation, not to assert too positively, or on insufficient data the existence of a causal connection between two sets of phenomena.

BOOK REVIEWS AND NOTICES.

ROCKY MOUNTAIN HEALTH RESORTS. An analytical study of High Altitudes in relation to the arrest of chronic pulmonary disease.—By CHAS. DENISON, A. M., M. D. *Boston: Houghton, Osgood & Co., 1880. The Riverside Press, Cambridge, 1880.*

To those who are acquainted with the former writings of Dr. Denison, the present volume will bring no disappointment. As a contribution to the study of climatology, it will take a leading place, and a perusal of its pages will enable the physician to gain at last a definite idea of the climate, which, according to different experiences, has been so much praised and condemned.

The book may be considered as a special plea for Colorado and high altitudes as a cure, or for the arrest of pulmonary consumption. As a statistical work it is of value as showing what can be done and what has been done in a certain number of cases, but the writer is a little too dogmatic in his statements, and is not sufficiently liberal in his estimates of other climates.

General experience proves that in a certain number of cases, phthisis is arrested and cured by a variety of climates, and at different degrees of elevation, sometimes even in the heart of our great cities, under seemingly most unfavorable influences.

The immunity of the inhabitants of the low Tartar steppes and of Ireland and the Faroe Isles, disproves at once the statement of exaggerated value of high altitudes. Although the pure, dry mountain air has no doubt a most important influence in arresting the disease, still the factor of excessive elevation (over 6,000 feet) must be eliminated.

Although Dr. Denison will find many opponents in his estimate of high altitudes, still his book will be of great value to all interested in the subject, whether physicians or laymen, as it presents the bright side of the Colorado climate.

In discussing the results of the climatic treatment he says, "The inflammatory group and hemorrhagic cases are most favorably influenced by the Colorado climate; while the influence in the catarrhal and chronic tuberculous classifications is much more indifferent," "but the catarrhal and tuberculous cases, especially with suspicious laryngeal complications, should not resort to great elevations, while much lung tissue is actively involved in the disease." He also says, "a somewhat prolonged residence is necessary in the climate which gives a certain consumptive the greatest benefit."

One of the most unfortunate objections to the Colorado climate, is alluded to in these words: "A partial recovery necessitates a permanent residence." The author does not agree with the generally received opinion that high altitudes are injurious to cases with hemorrhage. He says, "the hemorrhagic cases are to be preferred for high altitude treatment, next to the inflammatory group;" but he adds, "hemorrhagic cases, with excavation, are less suited to high altitude treatment, than third-stage cases generally." Also, "the advantages of high altitudes are preëminently for hemorrhagic cases, in the first stage, while hemorrhagic cases with excavations, especially if the bleeding has been recent and softening is in progress, should be interdicted from going to great elevations."

The book closes with some general advice on "Camping-Out," and includes an estimate of probable expenses. There is also an admirable climatic map of the country, giving interesting

data as to prevailing winds, temperature, humidity, and general terrestrial observations. We can heartily commend it to all those who desire to know the capabilities of Colorado as a health resort.

The press work and binding is a credit to Messrs. Houghton, Osgood & Co.

A PRACTICAL HANDBOOK OF MEDICAL CHEMISTRY, ETC. By WM. H. GREENE, M. D., Editor of Wurtz's Elements of Modern Chemistry, etc., etc. *Philadelphia: Henry C. Lea's Son & Co., 1880. 12mo. pp. 310.*

Even the most moderate demands on the physician of the present day include a more intimate knowledge, than formerly, of the collateral sciences with which medicine is so closely interwoven, and from which it derives such valuable assistance. Prominent among these stands chemistry. While even a short time ago, a very superficial knowledge of inorganic chemistry was thought an abundant outfit for the graduate, modern progress requires some familiarity with organic and with physiological chemistry as a minimum.

But, as is well known to both teacher and pupil, chemistry is a branch of science, for the acquisition of which neither mere lectures nor the memorizing of text-books suffice. So the most advanced institutions have introduced into their curriculum, practical experimental courses, from which already much improvement has resulted. Few, as yet, have gone so far as to include physiological chemistry among the subjects taught, and few are the books that would serve as a guide to the students for its practical study. Those who were familiar with Bowman's medical chemistry have often regretted that the rapid accumulation of new material had left that excellent little volume too far behind the present status of science to be reprinted as a mere revision. Hence, a book like the present, which proposes to teach the subject in a similar manner, not only theoretically, but by practical experiments, must be especially welcome. Its author has already earned the thanks of the profession by making accessible to them the work of Wurtz by a translation of singular excellence, and his present work is no less acceptable.

The introductory chapter on chemical manipulation, which is simply a short review of the processes already familiar to the student of practical chemistry, is followed by a brief but precise description of the properties and chemical reactions of the

proximate principles taking part in the animal economy. The formulæ are given in their shortest form, without allusion to the theoretical speculations about their constitution. Practical experiments serving to identify the different organic acids, sugars, albuminoids and other constituents of animal structures are described so that the student may make himself familiar with the special reactions of these bodies. A number of clear wood cuts illustrate the morphological characters, and a well deserved prominence is given to the microscopical appearance of the substances throughout the work.

The second part treats of the *systematic* analysis of urine and other secretions and excretions. The processes for separation are well selected and reliable, and are described with a sufficiency of detail to enable the student to execute his work successfully.

The third part, on the Detection of Poisons, retains many of the excellent features which made Bowman's work such a favorite in its time, yet adds with a judicious care an abundance of new matter, and omits processes no longer deemed trustworthy.

It is evidently far from the author's design to make expert analysts of medical students, but he points out to them the only way to become familiar with the important topics of medical chemistry, and to enable themselves thereby to judge intelligently of the labors of the biological investigator and the professional analyst.

The busy practitioner will find the work useful for reference on many subjects of interest not easily accessible elsewhere.

The typographical execution is in good style, the price (\$1.75) is sufficiently low, and we may confidently hope that no physician's library will be long without it. C.

EYESIGHT: GOOD AND BAD. A Treatise on the Exercise and Preservation of the Vision. By ROBERT BRUDENELL CARTER, F. R. C. S.; late Hunterian Professor of Pathology and Surgery to the Royal College of Surgeons, of England; Ophthalmic Surgeon to St. George's Hospital; Corresponding Member of the Royal Medico-Chirurgical Society, of Edinburgh. With Numerous Illustrations. London: Macmillan & Co. \$1.50.

In this little work—a 12mo., of 262 pp., divided into thirteen chapters—Mr. Carter, whose name alone, at least with the medical profession, is a sufficient guarantee of its excellence, has given the public a long-needed, popular and accurately in

structive treatise on the eye. It is clearly and concisely written, in the author's well-known vigorous and trenchant style, and in a sufficiently scientific manner, without being encumbered with scientific technicalities or unnecessary minor details.

The text is printed in large and clear type, and abundantly illustrated with cuts, so necessary to the thorough elucidation of this abstruse subject.

The first chapter is devoted to the gross anatomy of the eye. In chapter II., with great perspicuity, the author leads the reader, step by step, in very logical and systematic order, through some of the essential principles of optics, in order to fully illustrate all the conditions necessary to perfect vision, and all those incident to, or productive of the anomalies of refraction, subsequently described.

He clearly explains, in chapter III., the difference between the old system of graduation of lenses, and the present metric system. In chapter IV. he makes some very valuable suggestions to parents and teachers (although at their expense) concerning the undetected defective visual perception, of their children or pupils, who are frequently, cruelly and unjustly punished for stupidity. On the subject of spectacles, in presbyopia, chapter V., he accounts for and corrects, in very emphatic language, some prevalent erroneous notions and ignorant prejudices, concerning the hurtful effects of wearing convex glasses.

He treats in chapter VII. of the anomalies of refraction, for the detection of which we are rather surprised that he does not recommend, or even mention, the best test-types and test-diagrams in use, viz.: those of our friend and fellow-citizen, Dr. John Green, the American editor of Mr. Carter's larger work, the "Diseases of the Eye." This is the more surprising as Mr. Carter himself uses and prefers these tests to any others, as he admits in his above mentioned work.

After describing the correction of the anomalies of refraction, by means of proper glasses, he pays a high tribute to the skill and accuracy of American opticians, in their manufacture.

There is much wholesome advice given, in chapter X., on the "Care of the Eyes in Infancy and Childhood," and on this account, if no other, the book should be in the hands of every parent and teacher.

There is not, so far as we can detect, a single typographical error in the book, owing, no doubt, to the fact that in its production the author made use, not of the pen, but of an American type writer, whose merits he dwells upon at some length, in the chapter on "Contrivances for saving visual effort."

Although this valuable addition to popular medical literature is intended for the use of the unprofessional, there is much within its covers that would likewise prove highly interesting and instructive to the general medical profession, through whose instrumentality and recommendation alone, it will be likely to reach the public, for whom it was intended, and to whom we sincerely hope it will prove a great educator and benefactor.

W. A. F.

ANNUAL REPORT OF THE BOARD OF HEALTH, OF THE STATE OF LOUISIANA, TO THE GENERAL ASSEMBLY, FOR THE YEAR 1879. *New Orleans*: 1880.

We have here an octavo pamphlet of 264 pages, with two large mortality and meteorological tables.

As Paris is France, so New Orleans is Louisiana; certainly so in as far as this report of the State Board of Health is concerned; for, with the exception of brief reference to a few other places incidentally spoken of in connection with the history of yellow fever for the year, the report is made up of a description of the sanitary condition of affairs, and of the making of the Board and accessory organizations, in New Orleans alone.

Louisiana is in a condition similar to that of the great majority of the states, in the matter of having no local boards of health, or health officers, except in the larger cities. But she is working in the right direction—keeping what she has, and laboring for more and better things. On this subject, President Choppin¹ says, (page 26): "A bill for the creation of local boards of health, in all the country parishes, has been previously recommended by me. * * * The principal objects of the bill were to carry out a general system of recording vital statistics, and to provide a plan for improving the sanitary condition of human habitations and surroundings, in

¹ Since the issuing of the Report, Samuel Choppin, M. D., President of the Louisiana Board of Health, has been claimed by death. Not only sanitarians, but the profession at large, will regret the untimely loss of one who has done so much for the weal of humanity.

both urban and rural communities." He makes complaint that his recommendations had met with so little favor from the legislators. His experience in this particular is not peculiar; it finds a duplicate in most of the states.

The fearful ravages of the yellow fever in New Orleans, during the summer of 1878, thoroughly aroused the people to the importance of doing all that lay in their power to prevent a second visitation of the dread scourge. They had come to realize that it was a matter affecting not only human life, but also involving the interruption of business, thus inducing a loss to the city and state of millions of money. The local board of health, together with a citizens' auxiliary sanitary association, and the national board of health, rendered active and efficient services towards placing New Orleans in as good a sanitary condition, as a city so unfavorably situated, as regards excellent hygienic surroundings, could be. The result was that the disease did not originate there, nor was it allowed to have a hot-bed in which to thrive; and a more satisfactory condition of general good health had never before been known, nor the death-rate lower.

The President of the Board expresses the opinion, that the history of New Orleans, in its relation to yellow fever, proves that the epidemic in former years was traceable to a foreign source, and that an effective quarantine, though practicable, had never been tried.

The experience of the last three years, with regard to the efficacy of a strict quarantine, goes to sustain the theory of importation and importability of yellow fever. The pestilence of 1878 was due to an imperfect law, which allowed communication between ports where yellow fever existed, and New Orleans. No conditional quarantine can ever be made effective. No efficient mode of disinfecting ships and cargoes and destroying the yellow fever poison, has ever yet been discovered. Non-intercourse with ports where yellow fever exists, during certain months of the year, will forever rid New Orleans of this dreadful scourge.

It being desirable that a complete registration of marriages be effected, Dr. Choppin advised that licenses for the same be issued only by the board of health.

The reports of the three quarantine physicians, and of the seven sanitary inspectors, are full and valuable. They show

that New Orleans had, during the year, a sanitary investigation such as she never before experienced. The matter of drainage, ventilation of dwellings and schools, removal of filth, condition of privies, number of animals on premises, etc., were all thoroughly examined into, reported upon, and remedies applied, as far as possible, for their improved condition.

One of the happiest outcomes of all this expenditure of means and labor is, that the people have very largely become educated up to a knowledge of the importance of personal and public hygiene, to prevent disease. This education of the masses, once thoroughly attained, epidemics will be averted and the death-rate greatly lowered.

It is very creditable to Louisiana that she has a State Board of Health, and that it has been doing such commendable work, as shown by the annual report before us. Certainly, she puts to shame many of her sister states, which have as great need for, and are as fully able to support a public health board.

A. J. S.

PHARMACOLOGY AND THERAPEUTICS, OR, MEDICINE PAST AND PRESENT. By T. LAUDER BRUNTON, M. D., F. R. C. P., F. R. S., etc. *London: Macmillan & Co.* 1880. 12mo., pp. 212. \$1.50. (Through the Hugh R. Hildreth Printing Company.)

This is a very interesting volume, of about 200 pages, composed of the Gulstonian lectures, delivered before the Royal College of Physicians, in 1877.

The author defines pharmacology to be the study of the physiological action of drugs, and states that "the object of the lectures was to show how the progress of therapeutics is aided by an exact knowledge of the action of drugs obtained by experiment." As we have read the book, it seems to us that the author's purpose is, first, to show that the administration of drugs may be based upon exact knowledge; not upon tradition, superstition, or hypothesis, as it has formerly been; and, second, to show how this exact knowledge has been obtained, and how more may be added to the present stock.

The first four chapters are a history of medicine in the past, and tend to destroy all our reverence for authority. In the light of our present knowledge, it seems hardly possible that men should have believed many of the theories which they did believe, and which are mentioned in these preliminary chapters.

The next three chapters are devoted to pharmacology, and

give valuable detailed accounts of experiments with a number of drugs, viz: upas, (the active principle of which is strychnia), curare, and casca.

The next five chapters are devoted to the therapeutics of diseases of the circulation, respiration, and digestion. The last chapter is devoted to ferments, and we think is a little utopian in its expectation of medicine of the future.

The work belongs to the light literature of medicine. It is not a text book. Those drugs and diseases spoken of are few, and are discussed only to illustrate the methods of pharmacology, and the application of its principles.

We find no idea in the book which is not probably familiar to every careful reader and thoughtful student of medicine of the present day.

The book well repays one for reading, and increases our confidence in medicine as a science.

M. H. P.

A SYSTEM OF MEDICINE. Edited by J. RUSSELL REYNOLDS, M. D., F. R. S., Fellow of the Royal College of Physicians, of London, etc., etc. With Numerous Additions and Illustrations, by HENRY HARTSHORNE, A. M., M. D., Fellow of the College of Physicians, of Philadelphia, etc., etc., etc. Volume III. Diseases of the Digestive, Blood-Glandular, Urinary, Reproductive and Cutaneous Systems. *Philadelphia: Henry C. Lea's Son & Co.* 1880. 8vo.; pp. 999.

We have already expressed our high estimate of the value of Reynold's System of Medicine, of which the third and last volume has lately come to hand; and such examination as we have been able to give, satisfies us that this volume is no less valuable than those which preceded it.

We note all through the volume, under the different articles, the marks of careful revision and material additions, by the American editor, Dr. Hartshorne. Besides these, there are chapters from his pen upon Cholera Morbus, Cholera Infantum, Trichina Spiralis, Bronchocele, Progressive Pernicious Anæmia and Spermatorrhæa.

At the close of the volume is a general index to the three volumes, which will facilitate the use of the work.

We most heartily commend the complete work to any of our readers who desire to possess an encyclopedia of medicine, for this is nothing less than that.

J. H. Chambers & Co., 305 Locust street, St. Louis, are the general managers for the West, and orders or letters of inquiry should be addressed to them.

OUR HOMES. By HENRY HARTSHORNE, A. M., M. D., formerly Professor of Hygiene in the University of Pennsylvania, etc. Philadelphia: Presley Blakiston, 1012 Walnut street. 1880. 16mo., pp. 150. 50 cents.

Dr. Keen, the editor of the *American Health Primers*, made a good selection in choosing Dr. Hartshorne to write the volume upon the proper arrangement and construction of "our homes." His years of careful study of hygiene have well qualified him for the work; and in this little volume he has gathered together and presented in a very attractive style, many truths that are of vital interest to every householder in the land.

Most of the other volumes of this series are rather of personal and individual interest, relating to matters which concern each one for himself; this volume deals with the interests of the family.

The several chapters treat of the situation, construction, light, warmth and ventilation of houses, and then of water-supply and drainage, perhaps the most important and valuable chapters of the book, because generally the least considered and understood. The last two chapters, on population and workingmen's homes refer to the increasingly important problems of life in large cities, the best means of securing wholesome and safe homes for the working people. One of the most valuable signs of the times is the great interest that is being taken in such questions as these.

"Our Homes" supplies to the reader the most important facts to be considered in the matter of house construction, and by reference to more extended treatises, indicates how those interested can pursue the subject further.

THE STUDENT'S GUIDE TO DISEASES OF THE EYE. By EDWARD NETTLESHIP, F.R.C.S., Ophthalmic Surgeon to St. Thomas's Hospital, [London.] Philadelphia: Henry C. Lea, 1880. 12mo., pp. 358.

Mr. Nettleship has exactly indicated the character and scope of his book in its title. As a *student's guide* its "aim is to supply students with the information they most need on diseases of the eye during their course." If we add that it is exactly suited to the needs of a student who is studying diseases of the eye as a part of a general medical course, and in a London hospital, we shall accurately and sufficiently describe it.

Forty pages are devoted to the examination of the eye, including the uses of the ophthalmoscope; 198 pages, to the diseases and injuries of the eye; 46 pages, to errors of refraction

and accommodation, and to paralysis of the several ocular nerves; 35 pages, to operations; and 22 pages, to the relation of diseases of the eye to general diseases, to local disease at a distance from the eye, and to local disease of the neighboring parts. Six pages of formulæ and 11 pages of index, complete the volume.

The eighty-nine cuts, most of them diagrammatic, are newly drawn, and are, for the most part, well chosen and well adapted to illustrate the text. The exceptions which we would make to this favorable judgment are confined to some fourteen cuts intended to illustrate some of the appearances of the eye as seen in different diseases.

The author has done his work carefully and with excellent judgment; the few errors which we have detected are scarcely of enough importance to be severally noticed. An abominable new word, *papillitis*, has been adopted by the author from Leber; we can only hope that it may prove short-lived.

In view of the frequent occurrence of permanent and grave injury to the cornea from deposits of lead, even when applied only as a lotion to the eyelids, we may be permitted to regret that the "lead lotion" and the "lead and spirit lotion" have been admitted into the list of formulæ.

J. G.

WOOD'S LIBRARY OF STANDARD MEDICAL AUTHORS.

We have received four volumes of the library for 1880, and shall give a more detailed account of them in our next issue. We desire now merely to speak a word in commendation of the endeavor to present to the profession, standard medical literature at reduced prices.

In general style and appearance the volumes already issued, of the library for 1880, are much superior to those of the first year; and they are specially prepared for this purpose, not mere reprints of previous editions. The price of the twelve volumes is only fifteen dollars, and the money will be well invested.

The general agent of Wm. Wood & Company, for Missouri, Kansas, Colorado, Indian Territory, and Southern Illinois, is Mr. C. C. Pease, 514 Olive Street, through whom should be made all subscriptions for the "Library of Standard Medical Authors," or any other of the publications of that house.

BOOKS AND PAMPHLETS RECEIVED.

A TEXT BOOK OF PHYSIOLOGY. By M. Foster, M. A., M. D., F. R. S., Prælector in Physiology and Fellow of Trinity College, Cambridge. From the third and revised English edition with notes and additions by Edward T. Reichert, M. D., Demonstrator of Experimental Therapeutics, University of Pennsylvania. With two hundred and fifty-nine illustrations. *Philadelphia: Henry C. Lea's Son & Co., 1880.*

A HAND-BOOK OF PHYSICAL DIAGNOSIS COMPRISING THE THROAT, THORAX AND ABDOMEN. By Dr. Paul Guttman, Privat-Docent in Medicine, University of Berlin. Translated from the third German edition by Alex. Napier, M. D. Fel. Fac. Phys. & Surg. Glasgow. With a colored plate and eighty-nine fine wood engravings. *New York: Wm. Wood & Co., 1880. 8vo., pp. 344.*

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE FOR THE USE OF PHYSICIANS AND STUDENTS. By James Tyson, M. D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, etc., etc. Third edition. Revised and corrected. With illustrations. *Philadelphia: Lindsay & Blakiston, 1880. 12mo., pp. 183, cloth \$1.50.*

OVARIAN TUMORS. At what stage of the disease is the proper time to operate? By Edward Borek, M. D., Member of Medical and Surgical Faculty, of Maryland, and Baltimore Medical Association, etc., etc. Reprint from *Cincinnati Obstetric Gazette*, March, 1880. *St. Louis: Hugh R. Hildreth Printing Company. 1880.*

THE ABUSES OF MEDICAL CHARITIES. By M. P. Hatfield, A. M., M. D., Professor of Chemistry, Chicago Medical College, and Roswell Park, A. M., M. D., Demonstrator of Anatomy, Chicago Medical College. A paper read before the Chicago Medical Society, Feb. 2d. 1880. *Chicago: Knight & Leonard, Printers, 1880.*

STUDENT'S AIDS SERIES. Uniform in size, and price. Paper, 25 cents; cloth, 50 cents.

Aids to Chemistry.—Part I., Inorganic; the Non-Metallic Elements. Part II., Inorganic; the Metals. Part III., Organic. By C. E. Armand Semple, B. A., M. B., Cantab.; M. R. C. P., London.

Aids to Physiology.—By B. Thompson Lowne, F. R. C. S., England.

Aids to Materia Medica and Therapeutics.—Part II., (Double Part). The Vegetable and Animal Substances. By C. E. Armand Semple, B. A., M. B., etc. *New York: G. P. Putnam's Sons.* 1880.

A CASE OF COMPOUND DISLOCATION OF THE WRIST. Reported to the St. Louis Medical Society, by Edward Borek, M. D., Member of Medical and Chirurgical Faculty of Maryland, and Baltimore Medical Association, etc., etc. Reprint from the transactions. *St. Louis: Hugh R. Hildreth Printing Company.* 1880.

RELATIONS OF COMMUNITIES AND STATES DURING EPIDEMICS; An Address by the Honorable Jas. B. Eustis. Delivered at the Commencement of the Medical Department of the University of Louisiana, New Orleans, March 19, 1880. *New Orleans: L. Graham, Printer,* 127 Gravier Street, 1880.

THE VENEREAL DISEASES, INCLUDING STRICTURE OF THE MALE URETHRA. By E. L. Keyes, A. M., M. D., Professor of Dermatology and Adjunct Professor of Surgery in Bellevue Hospital Medical College, etc., etc. *New York: Wm. Wood & Co.,* 1880. 8vo., pp. 348.

TREATISE ON FOREIGN BODIES IN SURGICAL PRACTICE. By Alfred Poulet, M. D., Adjutant Surgeon-Major, Inspector of the School for Military Medicine at Val-de-Grâce. 2 volumes. *New York: Wm. Wood & Co.,* 1880.

THE HYSTERICAL ELEMENT IN ORTHOPÆDIC SURGERY. By Newton M. Shaffer, M. D., Surgeon in charge of the New York Orthopædic Dispensary and Hospital, etc. *New York: G. P. Putnam's Sons.* 1880. 8vo.; pp. 66. Cloth, \$1.00.

ON FLUID EXTRACTS AS PROPOSED FOR THE COMING PHARMACOPŒIA. Reprint from the *Therapeutic Gazette*, April 15, 1880. *Detroit: Geo. S. Davis, Medical Publisher.*

THOMAS KEITH AND OVARIOTOMY. By Marion Sims, M. D., LL.D., of New York (with Portrait.) Reprinted from the *Am. Jour. of Obstetrics, etc.* New York: Wm. Wood & Co., 27 Great Jones Street, 1880.

ON THE MANAGEMENT OF INFANTILE ECZEMA. By L. Duncan Bulkley, A. M., M. D., Late Physician to the Skin Department, Demilt Dispensary, New York.

SECOND ANNUAL ANNOUNCEMENT OF THE ARKANSAS UNIVERSITY MEDICAL DEPARTMENT, Session of 1880-81. *Little Rock: Arkansas Democrat Print.* 1880.

SOCIETY PROCEEDINGS.

SOUTHEAST MISSOURI MEDICAL ASSOCIATION.

Tuesday, May 24th, the fourth annual meeting of the Southeast Missouri Medical Association, was held at Commerce. At 8 o'clock, p. m., the meeting was called to order by the President, Dr. A. E. Simpson, and prayer was offered by Rev. R. G. Parks.

Dr. A. J. Gupton, of Morley, delivered an address of welcome, in behalf of the citizens of Scott County, to which a fitting response was made by Dr. S. S. Harris, of Cape Girardeau, in behalf of the Association.

The following officers were then elected for the ensuing year: President, Dr. J. D. Porterfield, of Commerce; Vice-President, Dr. E. R. Harris, of Pocahontas; Recording Secretary, Dr. G. W. Vineyard; Corresponding Secretary, Dr. J. W. Cannon; Treasurer, Dr. J. L. Haw, of Charleston.

The press, legal fraternity and clergy were invited to attend the various sessions of the Association.

On Wednesday morning, after the disposal of business relating to the Constitution and By-Laws, reports were heard

from the Counselors of several of the counties represented. The report of Dr. A. H. Miller, Counselor for Bollinger County, led to an animated discussion on the differential diagnosis of typhus and typhoid fevers. At the afternoon session further reports from Counselors of the several counties, were presented.

Quite a spirited discussion followed the report, by Dr. O. W. Cline, of a case of caries, with chronic ulcer of the leg.

Dr. W. F. Grinstead, read an essay upon Tumors, which formed the basis of some discussion. Dr. C. C. Valle's report of two cases of Puerperal Convulsions, also brought out the views of a number of the members upon that subject. Dr. J. L. Haw read an essay on New Remedies.

In the evening papers were read by Dr. H. Rider, on "Consulting Physicians"; by Dr. B. N. Bond, on "Expert Testimony"; and by Dr. S. S. Harris, on "Needs of a Country Physician."

Thursday morning the Association received additional reports from Counselors. Essays presented by Dr. C. A. Peterson, on "Diseases of the Nervous System," and on "Antiseptic Surgery," by Dr. A. J. Gupton, were discussed by several of the members, as was also a case of Necrosis of the Entire Humerus, reported by Dr. O. W. Cline.

Dr. Porterfield exhibited a case of Disease of the Spine. Dr. E. R. Harris reported a case of Necrosis of the Tibia.

Dr. S. S. Harris was elected to write a paper on the "Differential Diagnosis between Varicose Ulcers, Periostitis and Caries."

A discussion then followed upon the use of Ergot in Obstetrics.

In the afternoon, Dr. S. E. Strong addressed the Association upon the subject of Diseases of the Ear.

It was decided to hold the next meeting of the Association at Perryville, on Tuesday, November 2d.

It was resolved that the Missouri State Medical Association be invited to hold its next meeting at Cape Girardeau.

Delegates were appointed to the State Medical Association, and to the American Medical Association. Sundry bills were presented and ordered paid. Dr. Bond, of——, and Drs. Maughs and Rumbold, of St. Louis, were elected honorary members of the Association.

In the evening the officers for the coming year were introduced into office; and resolutions of thanks were passed to all who had contributed to the pleasure and profit of the meeting. Also the Counselors for the coming year, Standing Committees and Essayists, for the November meeting, were appointed.

After the adjournment of the Association, the members attended a banquet prepared by the ladies of Commerce for the guests to whom they would do honor. Everything had been done to make the occasion enjoyable. Substantials and delicacies to please the palate, floral decorations to gratify the eye, and music to delight the ear, with the watchful attention of a number of the city's fairest maidens, who were quick to anticipate every want, and supply it with dextrous skill, rendered it an event which will linger long in the memory of those members of the Association who were privileged to be present.



THE ILLINOIS STATE MEDICAL ASSOCIATION.

The thirteenth annual session of the Illinois State Medical Society, convened at the Academy of Music, Belleville, Ill., on Tuesday morning, May 18, 1880. Dr. J. H. Rauch, the Secretary of the Illinois State Board of Health, was called temporarily to the chair, as the train on which the President, Dr. E. Ingals, of Chicago, came, was an hour delayed. Rev. F. M. Van Treese, the Pastor of the M. E. Church, of Belleville, opened the session with prayer.

The address of welcome, on the part of the local Medical Society, was then given by Dr. West.

This was followed by reading letters from absentees; among these was one from Dr. N. S. Davis, enclosing his resignation as permanent Secretary; a position which he had filled from the founding of the Society, in 1850. His failing health was the sole reason for wishing to sever his official connection with the Society. The Society, in accepting his resignation, expressed by resolution, their appreciation of the services and devotion of Dr. Davis, in terms most flattering to him. Dr.

S. J. Jones, of Chicago, was, by a unanimous vote, elected to fill the position made vacant by Dr. Davis' resignation.

The regular order of business was then taken up, and Dr. Ingals, the President, having arrived and assumed his position, a delay until evening was granted Judge Snyder, in delivering his address of welcome on the part of the citizens.

Chicago was selected as the point at which the next annual session shall be held. Dr. Geo. Wheeler Jones, of Danville, was elected as President, and Dr. J. H. Hollister, of Chicago, was re-elected as Treasurer.

Delegates were elected to the American Medical Association, to the Missouri and other State Societies, Drs. Perryman and West, of Belleville, being the delegates elect to the Missouri State Medical Society.

Dr. J. H. Rauch and Dr. Chambers, of the State Board of Health, were present during all the session, and made a most satisfactory report of their work in Illinois during the past year.

The evening addresses of Dr. Hodgen, of St. Louis, on the "Formation of Character," and of Dr. J. S. Jewell, of Chicago, on "Hygiene," were delivered to large and appreciative audiences; and were, in every sense of the word, classical efforts.

The membership of the Society was largely increased by this meeting. Quite a number of visitors also came from the St. Louis Medical Society. The session was in every way a success; the only thing to mar in any way the pleasure of the session, was the failure of the railroads to abide by their agreements in returning delegates at one and one-third and one and one-half fares, all the roads save the Chicago, Burlington & Quincy, agreeing to terms, and only three, the Chicago & Alton, Illinois & St. Louis, and Vandalia, keeping the agreement.

We append a few brief extracts from Dr. West's address of welcome in behalf of the local medical society:

Gentlemen of the State Medical Society:—The pleasing duty devolves upon me of welcoming your honorable body to our little city of Belleville.

It is true, indeed, that your numbers may test the limited capacity of our accommodations, but it is also true that there is no time long enough, nor numbers so great as to develop a lack of hearty welcome for you, one and all.

We desire, therefore, that this session shall institute a new era, during which a mutual acquaintance shall teach us all the fact, that our professional men need the State Society, and it in turn shall be benefitted by a large accession to its membership from their ranks.

To command general attention, and to give due weight to its laws and edicts, it is necessary that this Society, (the highest medical tribunal in the State), should fully represent and have upon its roll of membership, the name of every medical man, in good standing, within the State.

At present our membership is 370, whilst the number of regular practitioners in the State is not less than 3,300. Do you not see, therefore, the urgent necessity of exerting some reasonable, continuous pressure on this large and influential body of outsiders, to have them unite and coöperate with the State Society in all legitimate medical enterprises?

Gentlemen, I have not forgotten that the limits of my duty were to welcome you to our city. Allow me then, in conclusion, to state, that the medical men of our city and county, are a unit in seconding the efforts of the State Society and the State Board of Health in all of their undertakings; and they heartily welcome you through me to abide a few days in their midst, hoping that when your lighter duties of exchanging ideas here are concluded, you may return to your home and the sterner duties of practice, bearing with you a pleasant memory of time profitably passed, and entertainment freely accorded.

In calling for reports of committees, the following order was observed:

ORDER OF BUSINESS.

Report of Committee on Croup, H. Z. Gill.

Report of Committee on Surgery, W. Hill, A. C. Rankin and J. G. Harvey.

Report of Committee on Ophthalmology and Otology, W. T. Montgomery, J. M. Everett and J. P. Johnson.

Report of Committee on Obstetrics, G. W. Nesbitt, E. L. Herriott and I. W. Fink.

Report of Committee on Necrology, T. F. Worrell, G. W. Albin and E. Ingals.

Report of Committee on Drugs and Medicines, C. B. Johnson, Jehu Little and Thos. Whitten.

Report of Committee on Practical Medicine, W. S. Caldwell, F. B. Haller and J. S. Whitmire.

Report of Committee on Gynecology, T. D. Fitch, J. Y. Campbell and L. H. Corr.

MISSOURI STATE MEDICAL ASSOCIATION.

Tuesday afternoon, May 18th, 1880, the Association was called to order by the President, Dr. G. M. B. Maughs, and the twenty-third annual session was opened with prayer by Rev. Mr. Williamson.

Hon. Amos Caffé, M. D., Mayor of Carthage, welcomed the association to the hospitality of the city and its citizens, who threw open their houses to the members and entertained them right liberally. An appropriate response was made by the President on behalf of the association.

Sixty members responded to their names upon the calling of the roll. Dr. J. M. Allen, of Liberty, was unanimously elected President of the Association and was duly installed in the position of honor, being cordially welcomed by the retiring President, Dr. Maughs. In responding to Dr. Maughs' greeting, Dr. Allen invited the latter to a seat with him upon the platform.

The Secretary reported in behalf of the Publication Committee, that 180 copies of the Transactions for 1879 had been distributed to the members, to the Associations of other states and to the leading medical journals of the country.

The Committee on Nominations presented their report which was adopted; and the following officers were elected: Vice-Presidents, T. U. Flanner, T. B. Lloyd, L. I. Matthews, A. B. Sloan, J. W. Smith; Recording Secretaries, A. J. Steele, F. J. Lutz; Corresponding Secretary, H. H. Mudd; Treasurer, C. A. Thompson.

In the evening Dr. Maughs delivered the "Annual Address" taking as his subject "Medical Specialties." The address was well received and enjoyed not only by the members of the Association, but by a considerable number of the Carthaginians who were present.

On motion of Dr. Steele a greeting was sent by telegraph to the Illinois State Medical Society in session at Belleville, Ills.: "Sister States; brothers in profession; united efforts; objects the same; happiness of mankind." Signed by the President and Secretary.

Wednesday morning. Dr. Steele read the report of a case of deformity of the wrist, and exhibited diagrams and the apparatus used for the relief of the deformity.

The report of the retiring Treasurer showed a balance of \$162.01 in the treasury. A motion was adopted exonerating the Treasurer from all blame for the loss of money deposited by him in the Mastin Bank of Kansas City, which bank has suspended payment.

Drs. Johnson, King and Lutz, reported cases of injury to the elbow-joint, Dr. Lutz calling attention to the danger of too prolonged immobilization of joints. Drs. Yates, Stokes, French and Hill, also took part in the discussion.

Dr. Engelmann's paper upon "Uterine Manipulations and Operations and their Dangers," was discussed by Drs. Geiger, Moses, Allen, King, Johnson, Thompson, Dodson and Jones.

In the afternoon Dr. Halley reported a successful operation for the relief of facial neuralgia. Dr. Mudd, of Committee on Progress of Surgery, read a paper on "Lithotomy and Lithotripsy" which lead to a discussion by Drs. Halley, Geiger and Mudd. The "Relation of Mind to Matter" was the subject of a paper read by the President, Dr. Allen.

Dr. Lutz presented a paper on "Abdominal Surgery, Cyst of Lateral Broad Ligament, Laparotomy and Recovery." Drs. Engelmann and Maughs made some comments upon this subject.

"Miasmata" was the subject of Dr. Tefft's paper, and Drs. Flanner, Maughs, Green, King, Johnson, Allen and Halley, took part in the discussion.

The Committee on State Board of Health reported a general lack of interest in this important matter, as prevailing throughout the state. They urged the members of the Association to acquaint themselves with the subject and to exert their influence upon the members of the legislature from their respective districts, to secure legislative action establishing such a board in this state. After discussion, the Committee was continued for another year, with instructions to take prompt action upon the matter.

Mexico was chosen as the place for meeting in 1881. The following telegram was received: "The Illinois State Medical Society in session at Belleville, Ills., desires to return most hearty greeting to your Association now in convention. Sym-

pathies, purposes, devotion, interest in our noble profession, all unite us in one common brotherhood. May that ever remain one and undivided. "Signed) E. Ingalls, President, S. J. Jones, Perm. Sec'ty.

Wednesday evening was devoted to a banquet, which was tendered to the Association, in Regan's Hall. Tables were prepared for a company of more than two hundred, and the members of the Association here made pleasant acquaintance with a considerable number of the ladies and gentleman of the city. After ample justice had been done to the feast of good things so bountifully provided, toasts were given and responses made, which gave opportunity for the display of no little rhetorical ability, by different members of the Association. Probably the most enjoyable speech was that of Dr. King, who kept the company in an uproar of laughter, while he related his experiences while searching for a fortune at Leadville.

Third Day—Morning Session.—On motion of Dr. Thompson, it was voted that members intending to read papers at the next meeting, be requested to send the titles to the Secretary, two months previous, and that the Secretary give due publicity to the same.

On motion of Dr. Norris, a committee was appointed to take such action as they deem best to promote the organization of County and District Associations through the State. The Committee appointed, were Drs. Norris, of Macon; Brown, of Hamilton; Drake, of Fairplay; Fournoy, of Bates City; Latimer, of Norborne; Mitchell, of Hermansville; A. Mass, of Neosho; Overstreet, of Smithton; Price, of Joplin; Rutledge, of Rocky Comfort; Wright, of Butler; Webster, of Trenton; Brooks, of Carthage; Clements, of Springfield; and Cannon, of Jackson.

Dr. Moses presented to the Association two instruments invented by Dr. Boisliniere, of St. Louis; a uterine repositor, and a small uterine forceps, to be used in the removal of tumors.

The paper on the Progress of Medicine, by Dr. Alleyne, and that on the Dry Treatment of Otorrrhea, by Dr. Todd, were read by title, and referred to the Committee on Publication.

The President announced the Standing Committees, and Delegates to the American Medical Association.

Dr. Laws reported for Committee on Medical Education.

Dr. Green offered the following resolution, which was carried:

Resolved, That it is the sense of the Missouri Medical Association, that it is highly important and now entirely practicable to establish a compulsory curriculum of three full courses, as a prerequisite for graduation in medicine, and that a copy of this resolution be sent to the Secretary of the American Association of Medical Colleges, for presentation at its next meeting, appointed to be held in New York.

A vote was passed, tendering thanks to the citizens of Carthage for their hospitality, also to the local committee of arrangements, to the railroads, and to the press.

S. W. KENTUCKY MEDICAL ASSOCIATION.

This organization is now nine years old, and it has been a very successful and useful society, a valuable means of true progress in professional work. The last meeting was held in the Court-house, at Paducah, Tuesday, May 18th. The meeting having been called to order by the President, Dr. C. W. Miles, was opened with prayer by Rev. Mr. Macduff.

An address of welcome was delivered by Dr. J. W. Singleton, Chairman of the Committee of Arrangements, who was afterwards elected to the office of President for the coming year, with Drs. J. R. Luten and R. J. Howard, Vice-Presidents; F. T. Davis, Recording Secretary; S. H. Singleton, Corresponding Secretary; and Dr. D. A. Maxwell, Treasurer. The next semi-annual meeting will be held at Mayfield, Ky., on the third Tuesday in November.

Papers were read by Dr. James Hendley, on "Cervical Endo-metritis" and on "Puerperal Convulsions;" by Dr. D. Futrell, on "Tannic Acid;" by Dr. J. L. Dismukes, of Mayfield, on "Syphilis as the Cause of Many Constitutional Chronic Diseases."

In the evening an able address was delivered to the Association and a large audience, by Hon. Q. Q. Quigley, upon the "Relations between Law and Medicine." By vote of the Association, Mr. Quigley was requested to furnish a copy of the address for publication in pamphlet form.

Dr. Chas. W. Miles then read his address as the retiring President, which was listened to with interest by all the audience.

Wednesday morning several interesting and valuable papers were read by different members of the Association, and referred to the Committee on Publication. Drs. Brooks and Thompson gave a history of the present epidemic of scarlet fever, in Paducah.

After the appointment, by the President, of Committees and Reporters for the November meeting, the Association adjourned, having had one of the most interesting and profitable meetings since its organization.



THE PHARMACOPŒIA CONVENTION.

The Pharmacopœia Convention which met last month in Washington, D. C., was well attended, delegates being present from between thirty and forty incorporated societies and institutions, and the debates were animated and earnest.

Dr. Amory, of Boston, was elected President of the Convention, and Dr. Judge, of Cincinnati, was Chairman of the Committee of Thirty-Six, which practically did all the real work of the Convention.

The *Philadelphia Medical Times* says: "In regard to the general plan of the future Pharmacopœia, the propositions of the American Pharmaceutical Society were largely adopted. It was decided that all formulæ should be in parts by weight, excepting in so far that the Committee of Revision was permitted to employ the volumetric process for fluid extracts, if, in its opinion, such process was the best. No doses and no toxicological or therapeutic information is to be allowed in the Pharmacopœia. The descriptions of drugs are to be much fuller than in the former editions, and especial care is to be directed to the giving of all distinguishing characteristics and tests. Finally, the arrangement of the Pharmacopœia is to be purely alphabetical.

The Committee of Revision is composed of twenty-five members, and is competent to fill vacancies, also to create vacancies, if members do not work."

Among the names of the Committee of Revision, we note from the region west of the Alleghanies, only Prof. C. L. Diehle, of Louisville; Prof. J. F. Judge, of Cincinnati; and Dr. O. A. Wall, of St. Louis.



ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, March 21, 1880. Dr. S. G. Moses in the chair.

BRIGHT'S DISEASE WITHOUT ALBUMEN OR TUBE CASTS.

Dr. Bryson.—Mr. President, I have here two specimens of white kidney. The first specimen is the large white kidney of Bright. When the specimen was given to me by Dr. Wyman, I took it to my office and compared it with Bright's plates, the colored lithograph, and it looked as if it might be a photograph. I did not see the patient. The specimen, as I said, was given to me by Dr. Wyman. I wrote to him in regard to the symptoms, especially in regard to the appearance of albumen in the urine. He replied: "I have no notes of the case in my possession. I remember the case perfectly well. There was no albumen in the urine. The urine was not examined microscopically. There was a very pronounced and peculiar waxy condition of the skin, well marked." The matter of the absence of albumen and tube casts from the urine was what I wanted to call attention to here.

I have here another specimen—a contracted white kidney; that form of disease in which it is generally supposed it has first undergone epithelial hypertrophy, and afterwards the cellular tissue increases, causing the contraction, as a secondary result.

I can give the history of this case better than the other. This was a young man, 28 years of age, who lived in Kentucky. He consulted me by letter in the Fall of 1878; he sent me a specimen of urine. I examined and found it was of low spe-

cific gravity—1014. I then wrote him, directing him to save the urine of twenty-four hours, measure it, and then send me a specimen of that, well stirred up, so that it would be a proper sample. I got him to do this every ten or fifteen days, for some three months, and I never at any time found either albumen or tube casts in the urine. The specific gravity was from 1012 to 1015, and there was no albumen or tube casts. He was given simple tonics, and improved somewhat, and then came on to St. Louis. When he came here, I found the heart was quite weak, and he soon grew worse and died.

I want to direct the attention of the Society to the absence of albumen and tube casts in these two cases of Bright's disease. Both are essentially the same form of kidney disease. There was detected, by the tests that physicians ordinarily use, in the one case, neither albumen nor tube casts, in the other, no albumen. I have frequently seen albumen behave very curiously when heat was applied, but I have never seen a case where nitric acid would not show it in urine, when present at all.

Dr. Robinson.—I can well understand, that you did not find either albumen or casts in the urine, especially in warm weather. When the temperature is high, albumen decomposes very rapidly, and the casts will be destroyed.

Dr. Bryson.—I examined it repeatedly; sometimes fifteen or twenty minutes after it was passed. The patient had no dropsy either.

Dr. Robinson.—Do you call this a case of *Bright's disease*?

Dr. Bryson.—Why not?

Dr. Robinson.—Certainly call it a disease of the kidney, but I think it is not Bright's disease.

Dr. Prewitt.—What was the condition of the kidney? As I understand, Bright's disease must have albumen and casts in the urine, and some dropsical manifestation at some time or other. I have seen a good many cases of contraction of the kidney, where albumen was at times apparently absent; but I have never seen a case where it did not show casts, more or less abundantly. It is very remarkable indeed that the man should have a kidney of that kind, without at some time or other, his urine showing casts. I believe, at times, there was albumen in the urine of both patients. In regard to the large white kidney, I look upon it as the result of an acute process, during which stage albumen is abundant; the large white

kidney being the chronic stage. So far as the history of this particular case is concerned, I don't know whether there was any evidence of acute disease at the beginning or not. So far as the other case, the contracted kidney, is concerned, there was at no time evidence of acute nephritis. I do not believe it was present, or that there was inflammation at any time in that or the other case.

Dr. Bryson.—In my patient I examined the urine once or twice a week, for six or seven weeks, and found there was no albumen or tube casts.

Dr. Robinson.—I think that it is very necessary to make examinations during morning and evening. I have seen several cases of Bright's disease where, in the morning, the urine presented no casts, and in the evening, on examination, I found albumen in not very large quantities.

Dr. Bryson.—I found no tube casts on examination of the patient, though I resorted to every possible method of finding them. I made ten or a dozen examinations of specimens of urine mixed with alcohol and allowed to separate.

I made a careful search for renal disorder, as the young man imagined he was subject to diabetes, though the symptoms which he had, were simply those of getting up at night, to pass urine, and those of dyspepsia. In the last stage he vomited, and the vomit smelled very much like decomposed urine. I examined it, and could discover nothing except a large quantity of bile.

When I first called to see him, he told me he had been unable to eat anything. I gave him some bismuth, and a very small quantity of morphine, and that eased his stomach; but the vomiting afterwards returned, and he could digest nothing; he sank rapidly.

Dr. Robinson.—Did you examine the stomach afterwards?

Dr. Bryson.—I did. There was no lesion that I could detect, in the digestive tract, except that the mucous membrane of the duodenum, was considerably softened, and the bowels were congested with venous blood.

Dr. Prewitt.—Have you ever had a case of large contracted white kidney, in which an examination of the urine did not show albumen?

Dr. Bryson.—I have not.

Dr. Robinson.—I say again, so far as the small kidney is con-

cerned, there are certain alterations in the structure of the kidney, but the patient did not have Bright's disease of the kidneys. He had no albumen in the urine, as I understand it; he did not have any dropsy, he did not have any tube casts; and I can't see that he had any of the symptoms of Bright's disease. What was the cause of death, is the point to get at in that patient's case.

Dr. Prewitt.—The point, I understand, in these cases is that we may have Bright's disease of the kidneys, without the appearance of albumen and casts in the urine. In a recent discussion of the Obstetrical Society, this question came up, and an observation was made that the presence of albumen in the urine was by no means a necessary feature of Bright's disease. Reference was especially made to the granular contracted kidney. Bright's disease is a very indefinite term, or rather it involves very different conditions of the kidneys. The granular contracted kidney is not unfrequently found with absence of albumen, at some times, but I think it is very rarely the case that you will not find albumen, after a careful examination made at various times. In the large white kidney and large red kidney, that we find in the acute renal troubles, I venture to say it will be a very extraordinary thing to find absence of albumen and casts in the urine. Now, usually the amount of albumen is not in direct proportion to the amount of disease of the kidney. It often requires repeated and careful examinations in order to find it in the contracted kidney. So far as the dropsy is concerned, we all know in the granular contracted kidney, the fibrous kidney, it is often a very late manifestation.

Dr. Bryson.—In regard to what Dr. Prewitt says, I consider it is by no means proven that in the large white kidney of Bright's disease, the disease always, or even in the majority of cases, is due to an acute inflammatory process. I don't think we have any evidence of that at all; it is simply hypothesis.

I consider that enormous epithelial proliferation may take place, without having been preceded by any acute process whatever. Again: I consider that the kidney may enlarge as much as this one, and then contract by fibrous degeneration, this being the result of an acute process at some time; I understand perfectly well, and I believe that albumen will be most likely to be found in those cases where an acute process has

supervened upon the chronic condition. So far as the small kidney is concerned, the urine may never have held albumen. I have used every test given in the books for finding albumen. I have used all of them without finding albumen. With regard to the decomposition of urine, I would say I have kept it for months, fastened perfectly tight in a bottle, and preserved it from decomposition.

Dr. Robinson.—I wish to say in regard to that point, I made an examination of urine, and found albumen in abundance, whereas four or five days after, not a particle of albumen was to be found, and the urine had a decided smell of decomposition. Albumen will change in a few days, and casts will be completely dissolved, and you will be unable to find them in four or five days. This point I want to make in regard to the examination. I agree with the remarks of Dr. Prewitt, and think that a great deal depends upon careful and repeated observations. In the granular kidney, we may examine specimens for several days and find no albumen, and yet after repeated observations, we will find some. I have seen some cases without any development of dropsy. I have two cases in my mind now, which I suppose to be granular kidney, in which there are no manifestations of dropsy, yet a careful examination of the urine, shows Bright's disease of the kidney. I have seen several cases in the last several years. In most cases a careful examination will show dropsy in some part of the body. In the granular kidney, dropsy is a late manifestation. Supposing that it is Bright's disease, I say it is a matter that ought to be made note of. I don't see how we are to make a diagnosis of Bright's disease, without any of the clinical features. The point I want to make is, how to make a diagnosis in cases such as that.

It is astonishing what changes may take place in the kidney and the patient still live. You will remember a pair of kidneys you took out in a post-mortem, some time ago, in which there were no remains of kidney tissue whatever.

Dr. Bryson.—I don't wish to be understood to say that either of these cases at *no* time, while the disease was progressing, had albumen—perhaps both albumen and tube casts. When I saw this patient, perhaps three months before he died, that general weakening, in which the heart takes part, in these cases with fatal termination, had already advanced to that

extent, that no albumen came through. It may be even so, in a case that Niemeyer presents, two months before death. Of course I did not examine all the urine that this man passed, but I examined it frequently. I examined urine twenty-four hours old; I examined urine freshly passed; I examined urine after exercise: I examined urine after rest and sleep; and, am able to say there were no tube casts or albumen in the urine sent to me. I am bound to confess that the diagnosis of the renal condition was made post-mortem.

If the members of the Society will look at Volume V., of the Transactions of the Philadelphia Pathological Society, they will find a case by Dr. Wm. Pepper, in which there was hypertrophy of the heart, where most careful examination of the urine, failed to show albumen or tube cast.

I will call attention to this small kidney. It is a contracted kidney; that contraction evidently supervened upon a condition that resembled the large white kidney. This is not the red, contracted kidney. It is not granular at all. It is a fibrous condition that has supervened upon a previous epithelial proliferation. I don't believe that every case of kidney disease presents the physical signs of renal disorder. Kidney diseases are, perhaps, more frequent than we think; because, in post-mortems, the kidneys are not always examined. I would like to ask Dr. Tuholske the proportion of cases of kidney trouble he finds in the dissecting room.

Dr. Tuholske.—I think we found, during last winter, no less than twelve cases, in about sixty-five subjects in the dissecting room.

Dr. Leete.—I would like to ask Dr. Bryson how long after the beginning of the trouble, he first heard of the patient?

Dr. Bryson.—The patient had been suffering some years with the symptoms of dyspepsia. While suffering with those symptoms, it was often necessary to pass urine at night, and he took it into his head that he had diabetes.

Dr. Prewitt.—I want to make a few remarks in reference to Niemeyer's remarks on the chronic kidney trouble, following the acute. I expect Niemeyer referred to the chronic Bright's disease, chronic contracted kidney, and fibrous kidney. I don't think it can be called in question that we may have a chronic condition following acute nephritis, as a result

of scarlet fever, for instance. I suspect that it does occur not unfrequently, and I take it that this is true in regard to the large, white, contracted kidney. Now, Dr. Bryson calls in question the point, as to whether the large white kidney ever follows acute nephritis. Dr. Roberts quite clearly reports just such a case, where the large white kidney had followed a case of acute nephritis. The patient lived some months. I think that it is the understanding with authorities generally, that we may have a chronic condition following the acute, but not the granular kidney, as that is essentially a chronic condition from the outset.

Dr. Leete.—Dr. Prewitt, may I ask you what you consider the ordinary evidence of acute nephritis.

Dr. Prewitt.—A large amount of albumen, with blood-corpuscles, in the urine, and rapid dropsy.

Dr. Leete.—Do you regard casts as essential?

Dr. Prewitt.—They are almost invariably present. In reference to contracted kidney, I should say this is the chief diagnostic feature—the large amount of urine passed, limpid urine, of low specific gravity.

Dr. Bryson.—I would like to explain one remark. I did not intend to say that chronic conditions never followed acute renal troubles, but I say they do not necessarily. We have no evidence that this is necessarily the case, even in large white kidney. We have no proof that cases have not occurred, where large white kidney is found without acute troubles. I consider that large white kidney may just as well be primarily a chronic condition, as granular contracted kidney.

SELECTIONS.

TRANSFUSION OF BLOOD IN SYPHILIS.

I have in the course of my experiments found another indication for transfusion of blood. In cases of tertiary syphilis or malignant syphilis, where iodide of potassium and tonics fail to do any good, and the patient is sinking, transfusion of blood is one of the best things that can be done. I did not get at this fact until last year I tried it as an experiment without any special faith in its efficacy. I knew it would revive the patient somewhat, that the introduction of a few ounces of healthy blood would be beneficial; but I did not expect the transformation which resulted. The patient was an inmate of Charity Hospital, and had had syphilis for a number of years, and also a cavity in the left lung. They had tried everything; the man was going to die; I suggested the operation, and he consented without any hesitation. The man had several very deep ulcers in his legs, which had been there for a long time; there were also ulcerations between the toes; there were large spots of pigmentation on the back and limbs; besides these, there were many large ecthymatous pustules scattered in different places. I injected between five and six ounces of blood, undefibrinated, mixed with ammonia. On Wednesday, five days after the operation, Dr. Van Buren showed the case to his class. The ulcers within that short period had healed over. They commenced to heal immediately after the operation; some of them were completely covered; the pigmentation spots left the skin before the end of the week. The change was very remarkable; his strength returned, his appetite returned, and he continued improving for two weeks. Then he had a hemorrhage from the lungs, and I transfused him again. I transfused him altogether three times. He remained in the hospital four months after the last operation, with scarcely a sign of syphilis about him, though his phthisis kept him back. The deposit was gradually breaking down in his lung, but the signs of syphilis disappeared for the time being. Of course there is strong likelihood of their

coming back: I don't know what became of him: he left the hospital soon afterward very much improved. The syphilis will probably show again, but there is nothing in our *materia medica*, no method of treating a case of syphilis that would have produced the same results as the transfusion did in this dying case of tertiary syphilis and phthisis. After that I transfused four other syphilitic patients, and all but one, who was dying when I operated, showed remarkable improvement, but not so much as in the first case. They were all in the last stages of phthisis and syphilis. Their ulcers healed, and their eruptions almost entirely disappeared, and that satisfies me that syphilis is one of the diseases which, when medicines fail to affect, should be treated with intra-venous injections of blood. I have no more doubt of that fact than I have of its beneficial influence in hemorrhage.—*Jos. W. Howe, in Ann. of Anat. and Surg. Soc., May, '80.*

ON THE USE OF IODIDE OF STARCH IN THE TREATMENT OF LUPUS ERYTHEMATODES.

Everyone conversant with the treatment of lupus erythematoses must be well aware how obstinately it resists internal remedies. At all events, my own experience hitherto has been that no internal remedy is capable of itself, even in isolated cases, of removing the eruption, although I have known it to disappear spontaneously.

Any medicine, therefore, which, in a certain proportion of cases, is capable of ameliorating this condition, must be hailed with satisfaction; and that will be found to be the case with iodide of starch. I learned this fact in the following way. My friend, Dr. Colligan, of Paisley, sent me a patient laboring under well-marked lupus erythematoses some years ago. We agreed to try from time to time various local applications, which certainly effected some improvement, but altogether failed to eradicate it. A considerable time after this, happening to meet Dr. Colligan in connection with another patient, he said to me: "By the by, do you remember the patient I sent to you with lupus erythematoses? I used all the applications you

recommended, but they did not remove the eruption; so I thought I would try the internal administration of the iodide of starch which I had often seen employed for other diseases by Dr. Andrew Buchanan, when I was a student. Well, I gave her a teaspoonful of it three times a day, and in two or three weeks the eruption was gone." I expressed myself equally surprised and gratified, and promised to give it a trial. For a couple of years before this, I had been seeing from time to time a lady, the sister of a medical friend, who suffered from the same complaint in an aggravated form, not only on the face, but also on the head; and, although some impression was made upon the disease by means of local applications, the results of the treatment had been anything but satisfactory. I therefore wrote to the doctor, mentioning Dr. Colligan's experience, and suggesting a trial of it in his sister's case, which he did. Some time afterwards, the lady came to see me, and I must confess that I was astonished to find that in her case too a great amelioration had taken place in her state (although she could not be said to be completely cured), much greater than from the previous persistent use of most of the recognized remedies, and that without the simultaneous use of any external treatment whatever. Since that time, I have in many cases used the remedy in doses of from one to four teaspoonfuls in water or water-gruel three times a day, and while in some no result whatever has followed, in a fair proportion of them much benefit has accrued; so that I now regard it in the light of a valuable addition, though far from an infallible remedy, to our means of combating one of the most obstinate diseases of the skin.

For the introduction of the iodide of starch as a remedial agent we are indebted to Dr. Andrew Buchanan, whose paper upon the "Physiological and Therapeutical Effects of Iodine" (*London Medical Gazette*, vol. xviii, page 515, and vol. xix, pages 41 and 80) will well repay perusal.

The following is the formula for its preparation: R. Iodi gr. xxiv; amyli, ʒj. Triturate the iodine with a little water, gradually adding the starch and continuing the trituration till the compound assumes an uniform blue color, so deep as to approach to black. The iodide should be dried with a heat so gentle as to run no risk of driving off the iodine, and it ought to be kept in a well-stoppered bottle. On no account should spirit be used in its preparation instead of water, as sometimes recom-

mended. The dose is a heaped-up teaspoonful in a draught of water or water-gruel thrice daily; but it may be safely increased even up to an ounce in some cases, if necessary to make an impression on the disease. I have generally found, however, if it be going to do good in lupus erythematodes, that the first-named dose is sufficient. Those who are inclined to give it a trial, should take care of two things: first, that the cases they are dealing with are really undoubted ones of lupus erythematodes and not lupus vulgaris; and second, that the medicine is freshly prepared and in accordance with the directions above mentioned.

In conclusion, I may say that I have found the iodide of starch an excellent remedy in other diseases, and notably in old-standing cases of syphilis; but upon this I need not enlarge at the present time.—*McCall Anderson, in The British Medical Journal, May, '80.*

SULPHIDE OF CALCIUM IN THE TREATMENT OF SUPPURATING BUBOES.

My attention was first called to the value of the sulphide of calcium in arresting processes of suppuration through an article in *The Lancet* of February 21, 1874 by Sydney Ringer, M. D. Dr. Ringer claimed that, when the product of suppuration in scrofulous sores was thin and ichorous, the administration of small doses of the sulphide of potassium or of calcium promptly changed the purulent fluid to one of a more healthy character, and that the healing of the sore was promoted. He also claimed that the formation of boils and abscesses was prevented by a timely administration of small doses of the sulphides, and that, when suppuration had already occurred in such cases, the suppurative process was quickly arrested through the influence of these remedies. Opportunity for a practical test of these claims soon occurred, and resulted in my own personal conviction of their entire correctness, and I have now for the last five years habitually prescribed the sulphide of calcium in cases of threatened sup-

puration in phlegmonous swellings from various causes, and, as a rule, with very gratifying results. The manner of its use was practically the same as advised by Dr. Ringer, viz., $\frac{1}{12}$ grain of the sulphide of calcium every two hours, or $\frac{1}{20}$ grain every hour, during the day and up to the time of retiring. Especially have I found small doses of the sulphide of calcium useful in arresting the progress of furuncular swellings and abscesses, and in preventing their occurrence when threatening. On the other hand, I have repeatedly tested the influence of this drug upon the suppurative processes in mucous membranes, as in gonorrhea, gleet, leucorrhea, etc., without being able to discover that it influenced or modified the suppurative process in such cases in the least degree.

Among the cases in my private practice where prompt arrest of suppuration was quickly followed by absorption of pus already formed and resolution of the tumor, and apparently from the use of the sulphide of calcium, were several inguinal buboes associated with chancroid. The simple fact that resolution occurred in these cases was (in accordance with the popular teaching) accepted as proof that the buboes were of sympathetic and not of chancroidal origin.

Authorities have long taught that, once the virus from a chancroid has been carried along a lymphatic vessel and deposited in the adjacent lymphatic gland, inflammation is at once set up in the substance of the gland. This, it is claimed, goes steadily on in spite of all and any treatment, until an abscess is formed. This must, sooner or later, through advance of the suppurative agency or by surgical interference, result in an open ulcer, the pus of which will possess the same vicious character as the chancroid from which it was derived. This variety of bubo is known as the virulent or chancroidal bubo. The suppuration of such buboes has been considered *inevitable*, and all buboes not pursuing this course have been set down as not of truth chancroidal but of simple or sympathetic origin. Inflammatory lymphatic enlargements associated with chancroid are very naturally dreaded as most likely to prove by results to be of chancroidal origin, and usually, after a few feeble attempts at treatment with a view to their resolution, glands so affected are encouraged to suppurate, and prompt incision and evacuation of pus are advised as soon as the slightest true fluctuation is recognized. If suppuration is indeed inevitable,

undoubtedly it is wise to encourage it, to evacuate the virulent product at the earliest moment, and thus afford access for efficient treatment for the destruction of this new-formed chancre. For this reason I had been an earnest advocate for early incision into suppurating buboes associated with chancre. My experience in the few cases above alluded to, however, made me incline to the belief that a thorough and extended trial of the calcium sulphide in cases of inflammatory buboes associated with chancre might give such results as to make its use imperative in every such case.

In order to gain further light on this important matter, a systematic use of the calcium sulphide was made in my service at Charity Hospital, in eighteen consecutive cases of inflammatory bubo occurring with, or as the immediate sequel of, well-pronounced chancre. All the facts considered of importance were noted by myself and under my direction by Dr. Johnson, my House Surgeon, and carefully tabulated.

Thus it will be seen that, out of eighteen cases of inflammatory bubo presenting the rational evidences of chancre origin, and treated systematically by the use of small doses of the sulphide of calcium, resolution occurred in fifteen, and that in only three cases was incision ultimately required.

If we apply to these cases the usual rule that chancre buboes always eventuate in chancre abscesses, always suppurate and require evacuation by natural means or surgical procedure, then we must hold that only three out of fifteen cases of inflammatory buboes associated with chancre were the result of transference of the suppurative process from the chancre to the adjacent lymphatic glands. It is just possible, however, that the influence of the sulphide of calcium may, in arresting suppuration, extend to the true chancre bubo. The apparent successful use of this drug in the series of cases herewith presented at least suggests and invites a trial of its efficacy in all instances of threatened glandular suppuration, whether associated with chancre or of purely sympathetic origin.—*The New York Medical Journal*, May, '80.

RESTORATION OF HAND AFTER COMPLETE SEPARATION FROM THE ARM.

Dr. L. L. Stanton, of Tarborough, N. C., reports the following remarkable case :

" On Friday afternoon, February 5th, 1880, I was called to see Mary Sumlin, a white girl aged eleven years, quite anemic and rather small for one of her age. While helping her mother to procure fire-wood she placed her hand in the way of an axe, and at one blow had it severed from the styloid process diagonally across the trapezium, passing through the scaphoid bone and posterior annular ligament, *dividing all the muscles, bones and blood-vessels, and completely separating the hand from the arm*, excepting a small portion of skin, below the articulation with the ulna; the hand was hanging at right angles to the arm, when I saw her, about thirty minutes after the accident.

I determined at once upon amputation, at the joint above, (the wrist), so returned to my office, a distance of half a mile, to procure the assistance of another physician; but finding this impracticable, I proceeded carefully to replace the hand, which was held securely in position with silver wire sutures and adhesive plaster.

In dressing the wound the patient complained of pain, when I used the needle in the arm, but none when it was used in the hand.

I secured the hand and arm upon a broad splint, and directed that they be kept warm by being wrapped in hot flannel cloths.

I saw her twelve hours afterwards; the hand was very much swollen; no sensation or pulsation could be detected, nor had she complained of any pain, but rested quietly during the night.

Saw her the next day; she now complained of a little pain, but the hand and arm presented the same appearance as yesterday.

Saw her upon the third day; could now plainly feel pulsation in the hand; it had changed its color, and I now for the first time thought it possible to save the hand. From this time

she did not have a bad symptom, nor was there any suppuration or secretions of any kind; the wound healed entirely by first intention.

I removed the sutures upon the fourteenth day, and afterwards she carried the hand in a sling, and is now able to extend the fingers and grasp with nearly the usual strength. There is no ankylosis of the wrist joint as I expected."—*N. C. Med. Jour.*, May, '80.

NOTES AND ITEMS.

AMERICAN MEDICAL ASSOCIATION.—The meeting of the American Medical Association, just held in New York, has been one of great interest and profit. The attendance was very large—eleven hundred and fifty delegates having registered before Wednesday evening, about fifteen hundred altogether.

The Association convened at 11 o'clock, A. M., on Tuesday, June 1st, at the call of the President, Dr. Lewis A. Sayre, who delivered his address, after prayer had been offered by Rev. W. F. Morgan, D. D., and an address of welcome to the delegates had been made by Dr. T. Gaillard Thomas. Probably the most telling part of his address was that in which he suggested the adoption by the Association, of a method of publishing the Transactions, similar to that of the British Medical Association. The *British Medical Journal* is the organ of that Association, and it is largely through that instrumentality that the British Association has become the most powerful medical association in the world, with an income of about seventy thousand dollars per annum.

The general sessions were held in the mornings, and the sections held their meetings in the afternoons. A number of entertainments were given, which were very enjoyable indeed. The cards of invitation to these entertainments, were really works of art. On Tuesday evening, a reception was given by the members of the medical profession and other citizens of New York, at the Academy of Music. On Wednesday eve-

ning, Messrs. Reed and Carnrick, Messrs. Scott and Bowne, and the New York Pharmacal Association, gave a complimentary entertainment to the members of the Association and their ladies, at Booth's Theatre, Edwin Booth taking the character of Iago, in Othello, with admirable support in the other parts. Thursday evening, Drs. Fordyce Barker and T. Gaillard Thomas, gave a reception at the Academy of Music; Mayor Cooper and Mr. August Belmont, also received the members of the Association at their residences that evening. Friday afternoon the Association were invited to an excursion on the steamer "Grand Republic," around and through the harbor of New York, to Coney Island, where luncheon was served.

Dr. John T. Hodgen, of St. Louis, was elected President for the next year, and the place of meeting is Richmond, Va.

ASSOCIATION OF AMERICAN MEDICAL EDITORS.—The 11th annual meeting of this Association, was held in New York, May 31st. The President, Dr. Powell, being absent on account of sickness in his family, had sent on his Annual Address, which was read by Dr. A. N. Bell, Dr. Frank Woodbury, Vice-President, in the chair.

The question of adopting the metric system, in the journals, was discussed, but no formal action was taken.

The following gentlemen were elected for the coming year: For President, Dr. George F. Shrady, of the *Medical Record*, New York; for Vice-President, Dr. E. M. Nelson, of the ST. LOUIS COURIER OF MEDICINE, St. Louis; for Secretary, Dr. Dudley Reynolds, of the *Medical Herald*, Louisville.

The meeting then adjourned to meet at Richmond, Va., the evening before the sessions of the American Medical Association, of 1881.

THE AMERICAN ASSOCIATION OF MEDICAL COLLEGES, also held its meeting in the afternoon of Monday, May, 31st.

The most important feature of the meeting, was the adoption of a resolution making three courses of lectures obligatory in all the Colleges represented in the Association. A copy of this resolution was sent to the Medical Editors Association, with the request that notice of this action be published in the various medical journals. This Association will also meet at Richmond, on the day preceding the meeting of the American Medical Association.

THE AMERICAN LARYNGOLOGICAL SOCIETY held its second annual meeting at Delmonico's, New York, May 31st, June 1st and 2d.

In the absence of the President, Dr. Louis Elsborg, of New York, Dr. J. Solis Cohen, of Philadelphia, acted as presiding officer. The meeting was largely attended by prominent laryngologists from different sections. Many interesting and valuable papers were read by Drs. E. L. Shurley, Detroit, Geo. L. Leferts, New York, Beverly Robinson, New York, D. Lincoln, New York, J. Solis Cohen, Philadelphia, Carl Seiler, Philadelphia, and others.

The next meeting of the Society will be held in Philadelphia, on the Monday following the meeting of the American Medical Association.

The following officers were elected :

President, J. Solis Cohen, Philadelphia; First Vice-President, W. C. Glasgow, St. Louis; Second Vice-President, J. O. Roe, Rochester; Secretary and Treasurer, Geo. M. Lefferts, New York; Librarian, F. H. Bosworth, New York.

DIET DISPENSARY.—The Brooklyn Diet Dispensary, having for its specific work the supplying of properly cooked, nourishing food to the destitute sick, was organized in January, 1876, and incorporated in 1877, by a few ladies who saw its great need. They have now two branches besides the central dispensary.

Blanks or orders are furnished all physicians, upon application to the corresponding secretary, or at either of the depots. Beef-tea tickets are also for sale to any one desirous of aiding their poor friends in this manner; and beef-tea is also for sale at all the depots, and many physicians have recommended it to their private patients.

From January 1st to December 1st, '79, there were given out 7,452 pints of beef-tea, 534 pints of mutton-broth, 20,623 pints of milk, $288\frac{3}{4}$ pounds of rice, 145 pounds of farina, $98\frac{1}{2}$ pounds of oat-meal, $33\frac{1}{4}$ pounds of barley, 21,029 eggs, $148\frac{1}{4}$ pounds of corn starch, 124 cans of condensed milk, and 403 glasses of jelly.

Similar institutions have been opened in Cleveland and Cincinnati, Ohio.—*Proceed. Med. Soc. of the County of Kings*, January, '80.

THE DOSAGE OF ELECTRICITY.—I long ago recommended the use of ~~these~~ three terms: medium, mild and strong currents, as the best approximation possible in describing the dose of electricity. * * * There is a tendency among all those whose actual experience in the treatment of disease is widest and most varied, to this practical basis for operations in electro-therapeutics, namely, that pain can be relieved, muscular contractions produced, and in general the relieving and curative effects of electricity, obtained by either current and by either pole, in any direction, ascending, descending or diagonal to the nerve, the practical difference, in the average of a large number of cases, being of degree more than of kind, and to be determined by the results in each case by itself.

This whole question of current direction may be summed up in this proposition, namely: that direct action of the positive pole is more calming, and direct action of the negative pole is more irritating, and therefore, when calming, sedative effects are desired, the positive pole is usually desirable, and when irritating effects are desired, the negative pole is preferable; and this without reference to the direction of the current, whether ascending or descending or across the nerve, or many nerves.—*Geo. M. Beard, in Jour. of Nerv. and Ment. Dis.*, January, '80.

REMARKABLE LONGEVITY.—A correspondent of the Charleston, S. C., *News*, gives the following particulars of a remarkably long-lived family: There are now living, William Smoak, 97 years old, and 10 children, 104 grandchildren, 391 great-grandchildren, and 70 great-great grandchildren, a total of 575 living descendants. Besides these there have died, 3 children, 35 grandchildren, 69 great-grandchildren, and 9 great-great grandchildren, 116 in all, which, added to the number living, gives a total of 691 descendants of one family.

ONE HUNDRED CALCULI.—At a meeting of the New York Pathological Society, Dr. Heineman presented one hundred calculi, which had been removed from the bladder of a Spitz dog, which had been used for physiological experiments. The bladder was completely filled up by them. They were found to be composed of triple phosphate, phosphate and oxalate of lime. The mucous membrane was not inflamed, and the muscular structure was not hypertrophied.—*Med. Gazette*, May 8, 1880.

TEN CONSECUTIVE BREECH PRESENTATIONS IN THE SAME WOMAN.—Randolph Winslow, A. M., M. D., reports the case of a colored woman, thirty-one years of age, married eleven years last September, who had borne ten children, all at or near term. In every labor the breech and inferior extremities presented, and delivery was accomplished in that position. All the children were dead when born, except the fourth, who is alive, and is now nearly seven years of age. This girl was much smaller than any of the others, but nearly perished, either from pressure upon the cord, or from the traction upon the neck, made by the midwife in attendance. In the third and tenth labors, a physician was called, and forceps were applied. In the other eight labors, a midwife was in attendance, and no instrumental interference was necessary.—*Am. Jour. Med. Sci.*, April, '80.

TREATMENT OF RANULA.—Dr. C. Lovegrove (Hythe) has found the following plan most efficacious. Pass a tenaculum through the base of the tumor, and draw the part somewhat forward. After withdrawing the thicker part of the tenaculum a little, pass a plain gold ring, such as is used when the ears are first pierced, by the side of the tenaculum through both holes: then clasp it securely, and leave *in situ* for three or four weeks, then remove. A permanent exit for the mucus, etc., will then remain, and all trouble will cease.

J. E. G. has found the following plan very successful on several occasions. Thread an ordinary curved needle with common silk suture; make a double thread; pass the needle through the cyst, tie the thread sufficiently short, that the loop lies within the teeth, and will not be bitten through when eating; move the thread to and fro every other day. If this be kept in for about a week, the cyst will have evacuated itself by means of this small seton: when the patient says that it no longer discharges, remove the thread, (seton), and let it granulate up.—*Brit. Med. Jour.*, May 15, '80.

PROFESSOR VIRCHOW was on April 14th returned to the German Imperial Parliament, as one of the candidates of the Liberal party.

The most brilliant entertainments furnished the Association at New York were by wholesale druggists and Medical Book Publishers.

A BABY ELEPHANT.—From the *College and Clinical Record* of Philadelphia, and from correspondence of the *Boston Medical and Surgical Journal*, we gather the following interesting particulars of a remarkable zoological event :

Between the 25th of May and the 20th of June, 1878, the elephant cow, Hebe, was covered seven times by an elephant bull, both animals belonging to the troupe of performing elephants in the possession of Cooper & Bailey's London Circus, which wintered in Philadelphia during the last season. In the act of copulation no peculiarity was observed by the attendants that would distinguish elephants from other animals.

The little elephant was born March 9, 1880. The period of gestation was between twenty months and twenty days, and twenty-one months and fourteen days, according as impregnation occurred at the last or first copulation. The birth occurred at night, about 2:30 A. M. When the calf was born, the six other elephants chained upon the same platform threw up their trunks, and, dancing around as far as their chains would let them, set up a trumpeting that produced a scene of wild excitement, and made the mother frantic. She picked up the calf with her trunk and threw it across the stable, a distance of about twenty yards; then, breaking her chains, she started after the little one, tearing down the railing and demolishing a stove-pipe in her course. The keeper now came in, and under his direction, the huge animal became quiet, and was again secured, and has remained docile ever since.

After the mother threw her, the baby picked herself up, and went toddling about the room, and when the excitement was subdued, she was led back to her mother, who received her with many caresses. In nursing, its mouth is brought to the breast; it does not suck through its proboscis, as was formerly supposed by naturalists.

The height of the young elephant was thirty inches; length from base of trunk to root of tail, thirty-five inches; weight two hundred and thirteen and one-half pounds.

The placenta has been preserved by Prof. Chapman, who exhibited it at a meeting of the Academy of Natural Sciences of Philadelphia, held March 23rd. It is deciduous and zonular, presenting a combination of the characters of the placentas of three different classes of animals.

CUTICURA RESOLVENT.—Each fluid ounce weighs 453.6 grains, and leaves, on evaporation, a residue weighing 25.17 grains, equivalent to 5.55 per cent. This residue consists of

Organic matter,	- - - -	21.86 grains.
Potassic iodide,	- - - -	2.13 “
Soluble salts, not iodide,	- -	.64 “
Insoluble ash (in water)	- - -	.54 “

25.17 grains.

The organic matter gave distinctive tests for aloin, chrysophanic, and iron-greening tannic acid, which reactions, taken together with taste, odor, and physical properties, point to the presence of aloes and rhubarb.

The following prescription would closely imitate the “Resolvent.”

Take of

Socotrine aloes,	
Rhubarb, each,	- - - - 1 drachm.
Potassic iodide,	- - - - 36 grains.
Whisky,	- - - - 1 pint.

Macerate over night and filter.—*New Remedies*, June, '80.

GREEN SOAP.—Geo. H. Fox recommends, in lieu of the German *sapo viridis*, which has been so much used of late years in the treatment of certain chronic skin affections, a soft olive soap which has heretofore been used chiefly in manufacturing silks and other delicate fabrics. He finds this a far more elegant article than the common green soap, which is often rancid, and contains varying amounts of alkali. He finds the olive soap of uniform alkalinity, wholly free from unpleasant odor, and capable of forming a clear solution with strong or dilute alcohol. The addition of a small per centage of glycerine, renders it a more agreeable preparation.—[*Med. Rec.*, Feb. 14, 1880.]

QUARTERLY EPITOME.—Wm. Townsend who for over thirty years has published the American reprint of *Braithwaite's Retrospect*, has now undertaken the publication of a quarterly which shall do for the current medical literature of this country what that retrospect has done for the English. The appearance of the first number was delayed by the illness of the editor; but it has come to hand with 150 pages, in form and general appearance similar to Braithwaite's of which it is simply “an American Supplement.” We wish the publisher all success in his new venture.

THE COST OF THE MILK supplied to the patients in the Mercy Hospital, Cork, during the past year, amounted to £120, or nearly a tenth part of the entire cost of the hospital. In reference to this matter, the medical officers of the institution remark that, in addition to the prescribed dietary, they have always given directions that milk should be allowed to the patients without limit, it being a cure as well as part of the diet, containing, as it does, every element essential for the formation of healthy blood, and renewing and restoring the tissue of the body worn out by a combination of severe labor and disease.— [*Brit. Med. Jour.*, April 10, 1880.]

THE WALKER PRIZE of one thousand dollars has been awarded by the committee of the Boston Society of Natural History, to Professor Joseph Leidy of the University of Pennsylvania, for his researches in natural history. Professor Agassiz is the only person to whom this prize has been awarded before. It was given for his study of echinoderms.

OBITUARIES.

DR. SAMUEL CHOPPIN, of New Orleans, died of pneumonia, May 2d, 1880, at the age of fifty-two years.

He commenced his medical studies in the Medical College of Louisiana, and was for two years resident student at the Charity Hospital. After graduating in 1850 he further prosecuted his studies in Europe. For five years following his return to New Orleans, he was Demonstrator of Anatomy in the college from which he had graduated. He was House Surgeon of the Charity Hospital, the duties of which position he discharged with credit to himself and satisfaction to all concerned. At the same time, he assisted in editing the *Medical News and Hospital Gazette*. He was one of the founders of the New Orleans School of Medicine.

During the civil war he served as Medical Inspector and Surgeon-in-chief to General Beauregard during the sieges of

Charleston and Petersburg; and evidenced capacity of the highest order.

Since the close of the war, he has had a large and remunerative practice in New Orleans. He held the position of President of the State Board of Health up to within a few weeks of his death.

DR. WILLIAM SHARPEY, F. R. S. This eminent scientific man died at his residence in London the 11th of April, aged seventy-eight years. He was born in April, 1802, at Arbroath, Scotland, graduating at Edinburgh in 1823. A writer in *Nature* says: "For years he was the greatest teacher of anatomy and physiology in this country, occupying a position side by side with Johannes Müller in Germany. Just as the influence of Müller's life and teaching is still powerful in that of his pupils, so we may confidently anticipate that Sharpey's works will follow him."

MORTALITY TABLE.

FOR THE FOUR WEEKS ENDING MAY 13th, 1880.

CITIES.	ESTIMATED POPULATION.	DEATHS.	DEATH RATE PER 1,000.
New York.....	1,097,563	2,315	27.4
Philadelphia.....	901,380	1,325	19.1
Brooklyn.....	564,448	882	20.3
Chicago.....	537,624	773	18.6
St. Louis.....	500,000	505	13.1
Baltimore.....	400,000	548	17.8
Boston.....	375,000	571	19.8
San Francisco.....	300,000	331	14.3
Cincinnati.....	280,000	408	18.9
New Orleans.....	210,000	463	28.6

